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THE UNIVERSITY OF ALBERTA

Perceptions of Vocational Education Teachers, Non-Vocational Education Teachers and School Administrators Toward Evaluation of Vocational Education Teachers in High Schools in Alberta

by

© Donald John Nordheimer

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF EDUCATION

IN

VOCATIONAL EDUCATION

DEPARTMENT OF INDUSTRIAL AND VOCATIONAL EDUCATION

EDMONTON, ALBERTA

FALL 1987

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THE UNIVERSITY OF ALBERTA

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled PERCEPTIONS OF VOCATIONAL EDUCATION TEACHERS, NON-VOCATIONAL EDUCATION TEACHERS AND SCHOOL ADMINISTRATORS TOWARD EVALUATION OF VOCATIONAL EDUCATION TEACHERS IN HIGH SCHOOLS IN ALBERTA, submitted by Donald J. Nordheimer, in partial fulfillment of the requirements for the degree of Master of Education.

Supervisor

P. Wigle

Date September 30, 1987

DEDICATION

This work is dedicated to my wife Deb, for her constant encouragement and to my super children Angela, Jeff and Ryan who gave up so much of their time for dad.

ABSTRACT

This study was conducted to determine if school administrators, non-vocational education teachers and vocational education teachers at the secondary school level in Alberta, held different perceptions towards the evaluation of vocational education teachers. From an aggregated population of 6,604 high school administrators and high school teachers in Alberta, a random sample of 400 individuals was selected (72 administrators, 307 non-vocational education teachers, 21 vocational education teachers).

To collect data a forty item, two part questionnaire was developed. General information questions were used to collect demographic data and an additional twenty-three questions were used to solicit the personal perceptions of 282 participants towards the evaluation of vocational teachers. For these questions a 5-point Likert scale was used. Prior to mailing the questionnaires a pilot study was used to assist with refining the questionnaire. Data from the 282 returned questionnaires was coded and subsequently analyzed by computer. Analysis of the data resulted in the following conclusions. A profile of characteristics from the majority of those involved in the study showed that they were male between 30 and 49 years of age, who possessed a Bachelor of Education degree and accumulated over 9 years of teaching experience while teaching either core academic or

vocational education courses in a school which offers a vocational education program. This person has been formally evaluated one or more times each school year from 1982-1987. Although this person was not directly involved in the development of a teacher evaluation program they were knowledgeable enough about teacher evaluation to indicate a preference for summative evaluation and in fact used self-evaluation instruments for self improvement. Significant differences existed between the administrator and non-vocational education teachers, and administrator and vocational education teachers with respect to a cluster of questions entitled "Methods of Evaluation". This resulted in 2 of the 3 null hypotheses being rejected.

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CHAPTER I

INTRODUCTION

Teacher evaluation has been mandated by Alberta Education to all school jurisdictions in the province. Accountability, to ensure that this mandate was being accomplished, can be found in the Provincial Evaluation Policies, Guidelines and Procedures Program which was announced by the Minister of Education, David King on April 13, 1984.

Each school jurisdiction was given the responsibility by Alberta Education to develop evaluation instruments which could be used to evaluate the performance of individual teachers within their system. Many of these school jurisdictions in turn requested that each school under its authority develop models and instruments which can be used to evaluate the performance of teachers in a local school. Under the new system of evaluation, which was put in place in 1984, each practising teacher in the province was to be evaluated by their immediate supervisor on an annual basis. To perform this administrative responsibility school administrators found they did not have any common lists, guides, criteria, standards or instruments which could be used to evaluate teacher performance. As a result of this inadequacy some school administrators have designed instruments that they use to evaluate teacher performance in

a particular school. This raises two very important and related questions. The first of these questions is: Can one assume that school administrators, who are not specialists in designing evaluation instruments, have the expertise to prepare a single instrument which is both valid and reliable that can be used to evaluate the performance of all teachers in a school where a diversity of programs of studies are offered? The second question closely related to the first question is: Should the same criteria be used to evaluate teachers whose teaching emphasis in presenting instructional content is psychomotor rather than cognitive or affective?

Popham (1973) and later Roth (1975) examined a wide variety of evaluation instruments that were used throughout many school jurisdictions in the United States by school administrators to evaluate the performance of their teachers. These two researchers came to the conclusion that nearly all of the instruments they examined were imperfect in some respect. In fact, both of these investigators found that every evaluation technique used by evaluators to measure teacher performance had significant and distinct flaws in them.

Validity and reliability of teacher evaluation systems has been a concern of numerous research investigations such as those completed by, Popham (1984), Wise, Darling-Hammond, McLaughlin, Berstein (1984) and Scriven (1981). The

research of these investigators although concerned with how valid and reliable the evaluation system was, were not concerned with how teachers and school administrators perceived the evaluation process, particularly as it applies to vocational education teachers.

As a result this study was undertaken.

Purpose of the Study

The main purpose of this study was to determine if vocational education teachers, non-vocational education teachers and school administrators at the secondary school level in Alberta, had different perceptions towards the evaluation of vocational education teachers.

Sub-problems

Three related sub-problems were used to fulfill the purpose of the research.

The first sub-problem was to identify whether there were perceptual differences between vocational education teachers and non-vocational education secondary school teachers toward the evaluation of vocational education teachers.

The second sub-problem was to determine if vocational education teacher participants had different perceptions toward vocational education teacher evaluation than do school administrators.

The third sub-problem was to determine if the group

designated as non-vocational education secondary school teachers had different perceptions toward vocational education teacher evaluation than do the school administrator sample.

Null Hypotheses

Results of the research process related to vocational education teacher evaluation as stated in the main purpose of this study was to determine the relationship of the variables given in the problem statement. Three null hypotheses were used to state these variables and were expressed as: There was no significant difference between the perceptions that vocational education teachers held and the perceptions that non-vocational education secondary school teachers had toward evaluation of vocational education teachers in the secondary schools in Alberta.

There was no significant difference between the perceptions that vocational education teachers had toward their evaluation and the perceptions that school administrators held toward evaluating vocational education teachers as part of their administrative mandate.

There was no significant difference between the perceptions that non-vocational education secondary school teachers possessed toward the evaluation of vocational education teachers and the perceptions held by school administrators in the secondary schools of the province.

Significance of the Study

Few research studies have been conducted in Alberta which reported on teacher perceptions towards teacher evaluation. Researchers such as: Yuzdetski and Elliot (1985), Townsend (1984), Duncan (1984), Rhodes (1984), Mireau (1984), Peddicord (1984), Berg (1983), Alberta Education (1980), and Holdaway and Reikie (1977), reported either on studies that were conducted in the Province which primarily focused on either teacher evaluation policies and practices or reported on the process to implement a new evaluation policy. Much of the data in many of these studies has been reported from the supervisory perspective. The study reported by Duncan (1984) described the evaluation practices that were used by evaluators to collect data for evaluating teachers. There were little data in the Duncan study that were concerned with the evaluation of the teachers in Alberta per se.

Most of the researchers who elected to investigate or make recommendations concerning teacher evaluation treat it as a specific topic to identify either teaching methods or teacher performance. These researchers tend to ignore how those involved in the evaluation process perceive the process as it may affect those being evaluated.

The results of this study should make available to school administrators information on the perceptions held by those being evaluated. These findings could prove helpful

to these administrators with their decision in establishing policies directed at the evaluation of teachers. This should provide additional significance to the study.

Additional significance for the study may be that school administrators at the elementary and secondary school level may find the results of the study of value to them when they evaluate teachers whose major responsibility is teaching the affective and cognitive domains of learning.

The final results of the study report the perceptions that vocational education teachers, non-vocational education teachers and school administrators had toward the evaluation of vocational education teachers. These results, when reported, should add to the literature on teacher evaluation. This should prove useful to other researchers who are interested in the topic of teacher evaluation and the perceptions held by those being evaluated.

Limitations

The following limitations were established for this study to help narrow its scope:

Those selected to participate in the study were restricted to vocational education teachers, non-vocational education teachers and school administrators in schools selected through the sampling procedure to be involved in the study. This placed a limitation on the generalizability of the research findings. This also placed a limitation on the reliability and accuracy of the research findings.

A second limitation is that the study considered only teachers' and school administrators' perceptions that were held by these two groups when the study was conducted.

The data that are collected were limited by the accuracy of response that each participant made to the statements on the questionnaire designed for this study when it was conducted. The way that these individuals interpret questionnaire statements placed an additional limitation on the investigation.

The participants in this study were limited to either of one of three population groups to be surveyed i.e., school administrator, vocational education teacher or non-vocational education teacher. Individuals that comprised each group had to spend more than 50% of their employed time at that position as identified on Alberta Education, 1986-87 Certificated Personnel Record (CPR) forms.

Operational Definitions

Definitions for terms that are used throughout this report are referred to as operational definitions. These definitions are used by the writer to establish for the reader a better understanding of the following terms:

Evaluation

From a review of the literature written on the subject of evaluation it was found that there are as many definitions for this term as there are writers who have

written on this topic. It is imperative that the reader have a clear understanding of the term "evaluation" as the term is used in this report.

Torgunrud (1982) suggests "Evaluation is the process of describing and judging the effectiveness of the schooling being given" (p. 2).

Holdaway and Reikie (1977) describe formal evaluation as "a written report, leading to a recommendation or a rating that is submitted to the central office of the school system" (p. 3).

Guidelines for Student Evaluation Practices. (Author unknown, 1983) states "Evaluation ascertains whether the teacher is teaching and the learner is learning. Evaluation is quantitative: it involves appraisal as well as measurement, for it includes the stage of making value judgments" (p. 1).

The Belmont School District (1974) of California in its publication Evaluating Teachers for Professional Growth considers evaluation to be a process to assist in making judgements which are directly related to the professional competencies of all certified employees of the school board. (p. 5) To show the relationship that exists between evaluation and the standards established for those who deliver instruction this publication states:

> Evaluation is the process . . . based on a broad knowledge of the areas of performance involved, the characteristics of the situation of the individuals being evaluated, and the specific

> standards of performance pre-established for their positions.
>
> Evaluation should promote awareness of the strengths and weaknesses of all certificated personnel, provide for growth and improvement and encourage beneficial technique or instrument, and it is a necessary function in maintaining a viable profession. Evaluation of personnel should be directed to the total educational process in order that children are able to develop to the best of their abilities. It should be constructive, fair and equitable. Communication between the evaluator and the evaluatee should be ongoing. (p. 5)

Strake (1983) provided a much simpler definition when he wrote, "Evaluation is an observed value compared to some standard" (p. 291).

The definition provided by Holdaway and Reikie was found to be acceptable to the researcher and will be used throughout this report.

Non-Vocational Education Teachers

For the purposes of this study non-vocational education teachers are all individuals employed by a school system in Alberta who also hold a Province of Alberta Teacher Certificate. Their designated position is to teach courses other than vocational education 22 or 32 level courses. These teachers would teach courses such as: mathematics, science, English, social studies, second languages, business education or physical education. School boards do not receive a vocational education grant from Alberta Education for these teachers.

Perception

Perception is a much studied field of psychology as it relates to "receiving, selecting, acquiring, transforming and organizing the information supplied through our senses" (Barber & Legge, 1976, p. 7). Bartley (1972) suggests perception as: "The immediate discriminatory results of energy reaching sense organs. This discrimination is expressed at the personalistic level and is not based solely upon action at a single set of sense organs. It is the utilization of the input to all sense organs being activated at the time" (p. 306). This same author later wrote: "perception is the immediate discriminatory response of the organism aroused through activation of sense organs" (Bartley, 1980, p. 11).

For the purpose of this study the latter definition provided by Bartley will be used.

School Administrators

This study considered school administrators to be all individuals employed by a school board in Alberta who held a Province of Alberta Teacher Certificate and who have been designated by a school board as a principal, vice-principal, assistant principal or department head in a secondary school under the jurisdiction of the school board.

These individuals are responsible to see that the policies, rules, and regulations established by the school board are effectively and efficiently carried out in the

schools where they administrate.

Vocational Education Teachers

A review of the literature indicates a vocational education teacher acquires this designation as outlined in the Industrial Education Manual For Guidance to Teachers Counsellors and Administrators (1983). According to this official document, of the Curriculum Branch of Alberta Education, the requirements for a vocational teacher in Alberta are as follows: "Second and third level courses identified as "22" and "32" must be taught by teachers qualified in the particular trade or technology as follows: 1. Journeyman certification, or equivalent in the non-designated trade areas. 2. Valid teaching certificate" (p. 51). For purpose of clarity the valid teaching certificate referred to in item "2" must be a Province of Alberta Teacher Certificate. In addition to the two aforementioned criteria and, for the purpose of this study a vocational teacher is one who is employed by a school system in Alberta to teach 12, 22, and 32 level courses, grade 10, 11, and 12 respectively.

Population

The population for this study included three discreet groups found in the teaching profession: high school administrators, non-vocational education secondary school teachers and vocational education teachers. After

considerable investigation an up-to-date list for each group was obtained from Computer Services, Alberta Education.

To access this data the researcher was required to meet the following conditions: submit a letter to the Acting Director Computer Services, Alberta Education. A copy of this letter may be found in Appendix A, page 132. This letter contained the following: a request for assistance to generate a sample population from high school teachers of vocational education teachers, non-vocational education secondary school teachers and school administrators in the province; indication that the required data would be used for research purposes; assurance that information collected would guard the anonymity of the research population and finally the sponsoring department that would use the data generated by the study had to be identified. That department was the Program Delivery Division, Alberta Education, Edmonton Region.

After this letter was received by the Acting Director, Computer Services, a meeting was held with that individual, two other representatives from Computer Services and the researcher. Descriptions for the three population groups were provided with the following three identity factors added: gender of the individual; whether or not the individual was teaching or administering in a school during 1986-87 school year; and finally the individual must teach or administrate in grades 10, 11 or 12.

After considerable discussion and in consultation with the staff from Computer Services the decision was made to select data that were available from the 1986-87 Certificated Personnel Record (CPR) to select the sample for the study.

Professional personnnel employed by a school system and holding a Province of Alberta Teacher certificate are required by Section 12 of the Alberta School Act to complete a Certificated Personnel Record form annually. This form is used to collect the following data: demographic information, employment status, type of teaching certificate, earned university degree and/or graduate diploma, vocational training and/or qualifications, major subject areas completed at university (3 or more full year courses), number of years of training for salary grid purposes, total number of years of teaching experience and finally major teaching activity or occupation during the last school year.

A subsection of the CPR requires each individual completing the form to identify their designated position at the location of employment where the form was completed. Personnel were only selected if they identified themselves on the CPR as school based rather than jurisdiction based and spent more than 50% of the time as a teacher or school administrator. For ease of retrieval, data obtained with the CPR forms were stored on computer disks.

Certificated Personnel Record Statistics

Table 1 includes data taken from the 1986-1987 CPR forms which indicate high school based designated positions, position codes and population counts for the administrator cohort.

Table 1

Designated Position, Position Code and Count for High School Administrators 1986-87 CPR

DESIGNATED POSITION	POSITION CODE	COUNT
Principal	2101	349
Assistant Principal	2102	379
Department Head	2103	453
TOTAL		1181

Data in Table 1 indicate the high school population of school administrators to be 1181 which includes principals, assistant principals and department heads.

Data in Table 2 show that there were 350 High School Industrial Education teachers employed in the province in 1986-87. Industrial education is a generic term that is used in educational circles in the province to include industrial arts and vocational education. To further categorize this generic classification and to identify the

specific vocational training and/or special qualifications

Table 2

Designated Position, Position Code and Count for Industrial Education Teachers 1986-87 CPR

DESIGNATED POSITION	POSITION CODE	COUNT
Industrial Education	2204	350
TOTAL		350

these teachers possessed, the following CPR codes were used. In actual practice these CPR codes are used to identify the specialization of the vocational education teacher and the approved course of study which that individual teaches.

CODE	FIELD	CODE	FIELD
110	Commercial Art	340	Sheet Metal
120	Drafting	350	Welding
130	Printing	410	Electricity
210	Aircraft Maintenance	420	Electronics
220	Auto Body Mechanics	510	Beauty Culture
230	Motor Mechanics	520	Cooking
310	Carpentry	530	Health Services
320	Machine Shop	540	Sewing
330	Pipe Trades	610	Performing Arts

In completing the CPR form each vocational education teacher identified himself/herself as an Industrial Education teacher and identified their area of specialization from the 18 listed. However, for the purposes of this study it must be made clear that these are high school vocational education teachers and not high school industrial arts teachers. The difference between these two teachers will be shown in the next chapter.

Data in Table 3 include designated position, position code and population count for the non-vocational education teacher cohort which were taken from the CPR form for the 1986-87 school year. Attention should be brought to the number of industrial education positions, actually industrial arts positions, found in this table equal 153. Individuals in this group of 153 identified themselves as not having any vocational training and for the purposes of this study were considered as non-vocational education teachers. Data in this table indicate there was a total high school population of 5073 non-vocational education teachers in 1986-87.

The totals from Tables 1-3 were aggregated in Table 4. Data from this table show that for the three cohorts there were 6,604 individuals. These data also show the number of people for each cohort.

Table 3

Designated Position, Position Code and Count for Non-Vocational Education Teachers 1986-87 CPR

DESIGNATED POSITION	POSITION CODE	COUNT
Regular 1-12	2201	4217
Special Education	2202	105
Home Economics	2203	202
Industrial Education	2204	153
Extension Programs	2206	81
Business Education	2207	315
TOTAL		5073

Table 4

Count of Certificated Personnel in All Cohorts 1986-87 CPR

CERTIFICATED PERSONNEL	COUNT
Total number of high school administrators	1,181
Total number of high school non-vocational education teachers	5,073
Total number of high school vocational education teachers	350
TOTAL	6,604

Sample

From each of the three populations a random sample was selected using the following procedure.

From personnel of the Division of Educational Research Services, University of Alberta, it was recommended that a random sample of 400 be taken from the aggregated population of 6,604. It was also recommended that a constant ratio be maintained for each of the three populations to ensure that the sample was truly random.

A random sample was generated by personnel of Computer Services, Alberta Education using the program for random selection taken from the Statistical Package For The Social Sciences ($SPSS^X$).

This program generated a random sample from the high school administrator cohort to be, 72; from the high school vocational education teachers, 21; and from the high school non-vocational education teachers, 307. Aggregated, the random sample size for the three groups totalled 400 participants.

From the randomization process the researcher was provided with three separate lists under the following titles: Random Sample of High School Administrators by School Name, School Year 86-87, Random Sample of Vocational Education Teachers by School Name, School Year 86-87 and lastly Random Sample of Non-Vocational Education Senior High Teachers by School Name, School Year 86-87. On each of

these lists the following specific information was included: school name, school code, teacher surname/first name/title, position, address and postal code.

The information provided on the three lists was used to identify mailing addresses for the participants in this study.

INSTRUMENTATION

A literature review of the methods used to design research instruments was made by the researcher to determine the most appropriate instrument to collect data for this study. From this literature review the researcher determined that a questionnaire would be used to collect data for analysis. From the literature review the researcher also learned of methods used to organize an instrument; techniques to word statements that would eliminate ambiguity and ensure that the statements would ask the intent the researcher wanted to state; how to design questions that were either (open-ended or closed); to sequence questions and finally to determine methods for acquiring maximum reliability and validity.

Consideration of the advantages for selecting a questionnaire, given by such authorities as, McCallon & McCray (1975), Berdie & Anderson (1974), Tuckman (1972) and Oppenhiem (1966), were: relatively inexpensive to collect data from a wide area due to mailing; cover a wide geographic area; may elicit more accurate information about

a respondent's feelings or thoughts due to anonymity; allows respondents time to contemplate answers; each respondent receives questions phrased in exactly the same manner and sequence; and finally it can be relatively easy to analyze data. Although a questionnaire has its advantages it is not without its disadvantages. Some of these are: does the respondent understand the questions asked as they were intended by the researcher; will the respondent answer questions with integrity; will the return rate be so low as to bias the results; do respondents have the ability or willingness to provide information crucial in determining the validity of questionnaire data; is the questionnaire too lengthy; do respondents view the study important enough to complete the answers with much consideration.

A number of drafts and subsequent revisions of the research instrument were prepared by the researcher with the guidance and direction of the major advisor of the study.

The instrument was then reviewed by a specialist in instrument design from the Department of Educational Psychology, The University of Alberta. Two important considerations for questionnaire refinement were made evident by this specialist. Firstly, all statements on the research instrument were analyzed to ensure reliability. Oppenheim (1966) states "Reliability refers to consistency, to obtaining the same results again." (p. 69). This authority also indicated that sets of questions will give

more consistent results. Reliability was accomplished for this questionnaire by categorizing questions in groups by topics.

The second consideration for questionnaire refinement was face validity. The specialist evaluated the research instrument questions to ensure face validity for each question was evident. Moore (1983) states "Face validity is a professional appraisal of what appears to be valid for the content the test attempts to measure." (p. 212).

Following, recommendations made by this specialist, the research instrument was piloted before use.

Pilot Study

The pilot study was conducted to further refine the research instrument. The major purposes of the pilot study were as follows:

To identify questions to which nearly everyone responds identically.

To encourage pilot study respondents to make specific comments and suggestions for refinement of the questionnaire.

To identify ambiguous words or entire questions.

To reveal offensive statements.

To reveal questions which respondents did not answer and find out the reasons why they did not answer these particular questions.

To check for adequate spacing for written responses.

To determine if instructions were adequate.

To determine the length of time required for completing the questionnaire.

It was recommended by the specialist in instrument design that a total of 15 participants comprise the pilot study group. Five pilot study participants were school administrators; five were non-vocational education teachers and five were vocational education teachers. For convenience and time efficiency the researcher selected 15 acquaintances who were readily available and met the qualifications that were previously mentioned in this paragraph. Selection of pilot study participants was not made on a random basis.

The pilot study questionnaires that were completed were analyzed for suggestions, criticisms and difficulties those involved in this phase of the study encountered in completing the research instrument. From this information, that provided by the major advisor of the study, the specialist in instrument design and the researcher, the final copy of the research instrument was developed. A copy of the research questionnaire can be found in Appendix C, page 141.

Methodology

The methodology used to bring this study to its conclusion is presented in this section of the thesis.

The research methods used to gather information related

to the topic of this study were performed either manually or by computer.

The researcher conducted a library search of the standard reference sources used by those conducting educational research. Doctoral dissertations and master's theses, professional journals, and association handbooks that dealt with the topic of teacher evaluation were also reviewed. In addition, the researcher attended a conference on teacher evaluation.

In conducting the literature review the following references were used: Education Theses and Selected Projects; The Canadian Educational Index; The Alberta Educational Index; The Education Index; Technical Education Abstracts; selected government documents from the Cameron Library; Social Sciences Citation Index; and lastly Resources in Vocational Education. Educational data bases were searched by computer. For the purposes of this study the two data bases searched were: Educational Resources Information Centre (NEW ERIC) and Dissertation Abstracts International. The NEW ERIC search was conducted at the Herbert T. Coutts Library, University of Alberta and the Dissertation Abstracts International search was conducted by Bibliographic Retrieval Services (BRS). To search the ERIC Data Base descriptors were selected from the Thesaurus of ERIC Descriptors, 11th edition, 1987. The following descriptors were chosen to search the ERIC Data Base:

administrator attitudes and teacher evaluation, teacher attitudes and teacher evaluation and vocational education, teacher attitudes and teacher evaluation, teacher evaluation and vocational education, teacher evaluation, and teacher evaluation and teacher attitudes. The descriptors used for the BRS Search were: teacher-attitudes or administrator-attitudes and teacher-evaluation and vocational-education teachers and industrial-arts teachers. Additional descriptors combined with these descriptors were secondary education, industrial education, and technical education which yielded a total of 128 hits or abstracts.

Results of the manual and computer data base searches revealed there were no research studies completed that determined if school administrators, non-vocational education teachers and vocational education teachers at the secondary school level, possess different perceptions towards vocational teacher evaluation. This helped to establish a need for the study.

The population identified for participation in this study was discussed previously in this chapter.

Also, the rationale and design of the instrumentation used for this research were discussed in a previous section of this chapter.

Two letters were developed by the researcher under the guidance of the major advisor. The first letter was sent to school superintendents and the second letter to those

identified as research participants.

The first letter sent to 97 superintendents of various school jurisdictions in Alberta requesting their permission for the researcher to involve teachers and administrators in their school system in the study. A copy of this letter may be found in Appendix B, page 137. The list of superintendents was developed from a computer printout provided by Computer Services, Alberta Education.

Fifty-one of the 97 superintendents or 52.6% granted the permission requested. To increase the rate of return follow-up phone calls were made to superintendents who failed to respond to the request. These procedures yielded an additional 46 superintendents who granted permission. This increased the rate of return on a percentage bases to 100% from 52.6%.

A covering letter was prepared that would accompany the questionnaire and other material to be sent to each participant. The covering letter contained the following: request for the individual to participate in the study, explanation for the purpose of the study, the length of time it would take a participant to complete the questionnaire, directions for returning completed questionnaires and gave a date for returning questionnaires. A copy of this letter may be found in Appendix C, page 140.

A self-addressed postcard was included with the package of material that was sent to each participant. The purpose

of this postcard was to identify those participants who completed questionnaires. Instructions in the covering letter requested participants sign and return the postcard either at the same time or a few days after they returned the questionnaire. A second reason for the postcard was to allow participants total anonymity on the questionnaire which was returned in an enclosed envelope. A copy of the postcard may be found in Appendix C, page 148. No identifying or codifying marks were placed on the questionnaire consequently no follow-up was possible.

Four hundred questionnaires were mailed to: high school administrators; high school non-vocational education teachers and vocational education teachers. Aggregated the percentage of response for the three cohorts was 70.5% (282/400). In this total there were 80.6% (58/72)% high school administrators who returned the questionnaire, 68.4% (210/307) non-vocational education teachers and 66.7% (14/21) vocational educational teachers. These data are found in Table 5.

Following receipt of the completed questionnaires, the data provided were analyzed.

These data were coded by the researcher and keypunched by personnel of the Division of Educational Research Services, University of Alberta, for computer processing. The resulting analyzed data was organized into tables and the findings for each question presented.

Table 5

Rate of Return for Each Cohort (N = 400)

COHORT	COHORT NUMBER	QUESTIONNAIRES RETURNED	% RETURN
Administrators	72	58	80.6
Non-Vocational Teachers	307	210	68.4
Vocational Teachers	21	14	66.7
TOTAL	400	282	70.5

These data and findings were summarized as conclusions and observations. To conclude this study, recommendations drawn from the conclusions were made.

Organization of the Thesis

The first chapter presents the research design of the study under the following topical headings: introduction; statement of the problem; sub-problems; null hypotheses; importance of the study; limitations; operational definitions; population; sample; instrumentation; pilot study and methodology.

The second chapter begins by discussing the differences and similarities between a vocational education teacher and an industrial arts teacher followed by the history of teacher evaluation in Alberta. A literature review related to the topic of teacher evaluation is followed by references

and findings of research related to perceptions of teachers toward teacher evaluation.

The third chapter presents an analysis of the data that were collected. These data and findings are organized as tables for ease of interpretation and analysis.

The fourth chapter summarizes the study, and relates information concerning conclusions, recommendations and observations resulting from the data analysis of this study. Also included in this chapter are some weaknesses that are related to the research.

CHAPTER II

REVIEW OF RELATED RESEARCH AND LITERATURE

The first chapter of this report provided a description of the research design and indicated that the central purpose of this study was to describe the perceptions that different types of secondary school teachers and school administrators held toward vocational education teacher evaluations in high schools in Alberta. To this end, the second chapter will include a review of the literature by focusing upon research related to teacher evaluation that has implications for this study and selected authors who have written on this topic.

This chapter will have the following organization: vocational education and industrial arts differences and similarities; teacher evaluation in Alberta; considerations for evaluating teachers; models of evaluation; and perceptions toward teacher evaluation.

Vocational Education and Industrial Arts Differences and Similarities

In the previous chapter the researcher indicated that a clearer understanding of differences and similarities between the subject area of vocational education and industrial arts must be made. The crux of this problem lies with some professional educators and lay public who have difficulty in comprehending the similarities and differences

between these two complementary secondary school programs. Although these differences are frequently very slight, they do become apparent when one identifies the intent, the purpose, and the objectives of these two practical arts programs. Among noted authors in industrial education Silvius and Curry (1971), Feirer and Lindbeck (1969) and Silvius and Bohn (1961) there is consensus that the purpose of industrial arts is to prepare youth to live in an industrial society. By definition according to Feirer and Lindbeck (1969) industrial arts is considered to be "the broad study of the tools, materials, equipment, processes, products, and occupations of industry pursued for general educational purposes in shops and laboratories of schools" (p. 15). Industrial arts is considered to be part of general education because it enhances the education of all students in the total school program. Wilber and Pendered (1967) in Industrial Arts in General Education believe that industrial arts is an essential part of general education and defend their position by stating that this program was conceived as "an answer to the problem of educating boys and girls to live in a world which may be accurately characterized as industrial and technological" (p. 1).

A distinguishing feature between industrial arts and vocational education is that the former does not provide specific job or trade specific training. Industrial arts does, however, provide the learner with insights into the

processes, tools, and materials found in the industrial complex of a productive society.

Both the terms industrial arts and vocational education were introduced into the educational literature during the first decade of the twentieth century. Since that time both terms have been modified or changed by authors or associations who have elected to write on both of these programs of study. One of the more recent authors to write on vocational education was Roberts (1965) who defined vocational education "as instruction which is planned for the purpose of developing basic manipulative skills, safety developments, technical knowledge, and related occupational information for the purpose of fitting young people for initial employment in industrial occupations and of upgrading or retraining workers employed in industry" (p. 285). Other authors have prepared definitions for the term vocational education. All of these definitions according to Evans (1971) are entirely unsatisfactory because "in its broadest sense vocational education is that part of education which makes an individual more employable in one group of occupations than in another" (p. 1). However, Evans did agree with other authors, i.e., Silvius and Bohn (1961) that vocational education is considered specialized because this type of education is not the same for all people. This form of education is designed to provide instruction leading to entry level skills for the

learner for a chosen occupation, "It complements rather than competes with general education, for every student with a vocational objective must have a sound framework of general education upon which to build" (Silvius & Bohn, 1961, p. 73).

Mathews (1984) in his research considered these definitions for vocational education inappropriate because "of the wide variety of terms that are used in Canada that are used to prepare the learner with the skills, knowledge, and attitudes to enter the world of work." (p. 7) In Canada educators use such terms as vocational, technical, technical-vocational, or industrial education as descriptors for courses that are used to prepare students with occupational entry skills. This adds to the confusion of those attempting to select the correct term because in Canadian literature the terms vocational and technical are often used as synonyms.

Federal legislators in the House of Commons, to avoid this vocabulary trap, elected to use both terms when they enacted the Technical and Vocational Training Assistance Act 1960 which became known as TVTA. This was done by design because this omnibus bill included manpower training programs per se, which is a federal responsibility, and educational programs both secondary school and non-university post-secondary education, e.g., technical institutes, which is a provincial responsibility. According

to the interpretation of the Act, technical and vocational training means:

> any form of instruction, the purpose of which is to prepare a person for gainful employment in primary or secondary industry or in any service occupation or to increase his skill or proficiency in, and, without restricting the generality of the foregoing instruction for that purpose in relation to any of the following industries or occupations:
>
> i. agriculture
> ii. fishing
> iii. forestry
> iv. mining
> v. commerce
> vi. construction
> vii. manufacturing
> viii. transportation and communications. (TVTA, Article 1b)

This Act encompassed no fewer than nine distinct education or manpower training programs. These were later expanded to ten. These programs were cost shared programs. Among these were Vocational High School Training Programs (V.H.S.), Program I and Program for the Training of Technical and Vocational Teachers (T.T.) Program 7. Both of these programs are important to this study because Program 1 became an integral part of secondary education in the province in which a minimum of one-half of the school time was devoted to technical, business and other vocational courses specifically designed to prepare the student with entry level skills for a selected occupation.

According to the Regulations of Schedule 7 of the Act, to be eligible for technical training a trainee had to possess full occupational competence in the field in which

the trainee was to give instruction. This was interpreted by educational authorities in the province to mean journeyman status in apprenticeship trades or the equivalent for non-apprenticeship trades.

Industrial arts teachers as a result of their university preparation are considered to be generalists who have a wide variety of use level of skill needed to process both natural and man-made materials. This university preparation also prepares these teachers with learning experiences that will permit them to teach a limited number of basic technologies found in a productive society. Upon graduation these teachers will teach in a multiple activity laboratory which is equipped to offer instruction in a variety of industrial or technical areas for breadth purposes. Conversely, vocational education teachers after completing the teacher education program of study will teach their trade specialization in a unit shop. This type of educational facility is an organizational plan for teaching a trade or a technical subject where students concentrate on only one type of shop work, or work with only one kind of material. (Silvius & Bohn, 1961, p. 600) In a unit shop there is one major activity being taught, i.e., machine shop, carpentry, beauty culture, and so forth. This is contrasted with the multiple activity laboratory where the teacher may be teaching materials and technologies combined.

The vehicle used to teach either a use level of skill

to industrial arts students or occupational entry level skills to vocational education students is referred to as a project. For the industrial arts student, projects are chosen to meet the aims of the course and to be of interest to the student. Projects for the vocational education student are trade specific based on the aims of the course and upon practices found in the specific occupation in which the student is developing the required competencies.

While industrial arts and vocational education have common characteristics to a point, when viewed specifically they are two distinct areas in education. (Ericson & Seefeld, 1960) These two authors, in Teaching the Industrial Arts make a comparison of twelve characteristics of these two subject areas. The following is how Ericson and Seefeld compare these characteristics:

INDUSTRIAL ARTS	VOCATIONAL EDUCATION
1. A definite phase of general education based on values attained principally through manipulative activity and study of industrial materials and of industrial life.	1. A specialized program for the purpose of preparing students for remunerative employment.
2. Emphasis placed upon exploration and participation rather than upon skill and efficiency.	2. Development of trade skills and occupational competence is emphasized.
3. Open and valuable for all students whether talented or not.	3. Students selected with reference to aptitude for the work.
4. Pupils of all ages eligible.	4. Available to students of high-school age and older.

5. Aims best served through a variety of experience with tools and materials representing many industries and crafts.	5. Concentration on one trade or occupation.
6. Equipment need not match industrial conditions.	6. Working conditions and equipment should basically be parallel to industry.
7. Classes held for single class periods except in special cases.	7. Work carried on three or more hours per day in trade practice and related subjects.
8. Not reimbursed through special federal funds.	8. Reimbursable through state and federal funds.
9. Teachers primarily prepared in teacher-education institution.	9. Teachers selected from trades and given professional courses or programs.
10. Course content, length of time, etc., determined by school conditions.	10. Course content and duration of courses arranged through advisory committees.
11. Projects are chosen with reference to student interest and educational needs.	11. Work assignments based upon practices in the trade.
12. Success measured in terms of pupil growth rather than skilled work.	12. Standards of workmanship judged in the light of demands of the trade. (pp. 258-259)

Industrial Arts was introduced as manual training in 1900 into the Northwest Territories which later became the provinces of Alberta and Saskatchewan. Since then in Alberta it has had a number of titles which included Manual Arts 1900-1926, Technical Education 1913-1926, Technical Electives 1936-1949, Industrial Arts 1949-1969, Industrial Education 1969-1983, and the Practical Arts 1983 to date. (Preitz & Andrus, 1979)

Vocational education in Alberta has been traced by Chalmers (1967) to the Macdonald Manual Training Program of 1900 - 1903. The federal government since 1912 has had a long history in enacting legislation to assist the provinces in the cost sharing of secondary school vocational education. The most recent act was the Technical and Vocational Training Assistance Act 1960. Bryce (1970) points out that for the phase-out arrangements for the capital expenditures program alone, the federal contribution was over a billion dollars (1, 146, 047, 200.00). (p. 309) The allotment for Alberta was computed at $79,104,000.00, to this amount the province contributed an additional $47,521,000.00 for a total expenditure of approximately $126,725,000.00. (McKinnon, 1967, p. 4) Of this amount, 64%, went for the construction of vocational education wings or to modify existing schools to house vocational education programs of study. (Mathew, 1969, p. 48)

The Department of Education by 1963, had approved the construction of 18 vocational education facilities. By 1985, with no federal cost shared dollars, that number had expanded to 52. In these facilities there are seventeen approved courses taught that are either provincially approved or locally designed vocational education courses. Among these courses are: Automotives, Autobody, Beauty Culture, Building Construction, Business, Drafting, Electricity, Electronics, Food Preparation, Graphic Arts,

Health Services, Horticulture, Machine Shop, Piping, Sheet Metal, Visual Communications, and Welding.

Until the 1969-70 school year Alberta maintained a two stream program for the practical arts subjects of industrial arts and vocational education. When the industrial education concept was first introduced by Department of Education personnel in 1969 and until its implementation three years later 1972, that time span was indeed frustrating for teachers of industrial arts and vocational education. The main reason for that frustration was that these teachers had to become conversant with the new terminology associated with industrial education.

The industrial education program they had to become knowledgeable about amalgamated the seventeen vocational education programs into the following seven career fields: Graphics; Mechanics; Construction and Fabrication; Electricity/Electronics; Personal Services/Performing Arts; and Horticulture. For each career field there are a number of "vocational education courses". To illustrate, included in the Mechanics career field were Automotives; Autobody; Aircraft Maintenance and Agricultural Mechanics. The industrial education program is made up of the following five phases: Familiarization, Exploration, Orientation, Preparation, and Occupation. The program, theoretically begins in the elementary school and terminates either in the world of work or in a post secondary educational

environment.

Under this new program for industrial education, junior high school industrial arts became Junior High School Grades 7, 8, 9 Industrial Education. Following this phase of the program is the high school phase which is comprised of two distinct programs: Industrial Education 10, 20, 30, previously Industrial Arts, and Industrial Education 12, 22, 32, formally Vocational Education.

The Industrial Education 10, 20, 30 series of courses are taught by industrial arts teachers in a multiple activity laboratory. These courses are for general education.

The series of courses designated Industrial Education 12, 22, 32 (Vocational Education) are taught by teachers who have journeyman certification in apprenticeable trades or the equivalent work experience in non-apprenticeable trades. The 12, 22, 32 series of courses are taught in unit shops and the course content is designed to develop in the student occupational entry level skills in the trade.

Although the industrial education concept and its two program streams have been in place and operational in the schools of the province for over a decade the differences and similarities between these two programs are still not apparent.

The following information will assist in clarifying some of the differences and similarities between these two

types of teachers.

The program each teaches at the senior high school level in Alberta indicates a major difference between these teachers. For Industrial Arts teachers the Industrial Education Manual For Guidance To Teachers, Counsellors And Administrators (1983) states:

> The Industrial Education program courses are identified as IE 10A, 20A, 30A, and IE 10B, 20B, and 30B.
>
> The tens and twenties are 4-5 credits and the thirties are 5 credits.
>
> The courses are made up of modules, each with a minimum of 25 hours of content and may be expanded to 33 hours. Three to five modules make up the requirements for 4-5 credits.
>
> There are fifty-six modules to choose from with about an equal number from each of the career fields:
>
> - Power
> - Materials
> - Graphic Communications
> - Electricity-Electronics - Computer
>
> Three modules of a general nature are also available. These are:
>
> - Research
> - Development Module
> - Production Science Module
>
> Specific programming is a local decision. If a cluster of modules in an area or career field is desired this can be scheduled. Sequencing, too, is left to the teacher and students insofar as content allows it.
>
> Procedurally, students may register in four modules for 4-5 credit course. The first four taken by a student will be registered as 10A. The next four modules could be called 20A and so on. If after having completed 13 to 15 credits the student wishes to continue, he/she may do so and

> the next course becomes 10B. An alternative would be to register in eight modules for ten credits and identify the courses as 10A and 10B. The "A" and "B" connotations have no significance other than to identify the sequence of modules. However, modules should not be repeated.
>
> The Industrial Education 10, 20, 30 series is flexible and versatile, allowing schools with one or multiple laboratories to plan maximum use of their facilities. (p. 12)

The modules used in the Industrial Education 10, 20, 30 program are provided in Appendix D, page 150. From this information on programming one is made aware of the fact that one teaching Industrial Education 10, 20, and 30 must be a generalist in four career fields. These teachers are referred to as Industrial Arts teachers.

Educational training of Industrial Arts teachers is another important consideration one must be made aware of when comparing Industrial Arts teachers and Vocational Education teachers. The Department of Industrial and Vocational Education, University of Alberta provides a four year program leading to a Bachelor of Education with specialization being the Industrial Arts Route. The University of Alberta 1986/87 Calendar states:

> The Industrial Arts Education Route provides preparation to teach, with specialization in teaching about industry with its application of various crafts and technologies. The program in the schools is part of general education, with emphasis at the junior high school level on exploring the technological society in which we live. At the senior high school level the range of activity usually narrows and may include orientation to various career fields. The program focuses on industry, its materials and its technologies, as well as the occupational

characteristics of careers in a modern technological society.

A large part of the Industrial Arts Education program is conducted in laboratories where students learn to use the materials, machines and technology of modern industry. Further, Industrial Arts Education students learn how to teach in an industrial arts laboratory environment. (p. F-15)

To become the generalist teacher for Industrial Arts one clearly sees the university training affords the technical expertise to teach the many modules offered in the senior high Industrial Arts program.

Vocational Education teachers too must complete a four year program leading to a Bachelor of Education. This is where the similarity ends. The University of Alberta 1986/87 Calendar states:

73.5 Vocational Education Route

73.5.1 General

The Vocational Education Route to the BEd degree provides preparation in two general instructional specializations:

(1) High School Specialization
The high school career specialization provides preparation to teach, with specialization in teaching job entry skills in designated trade, business and technical areas at the senior high school level. These subject areas include Autobody, Automotives, Beauty Culture, Building Construction, Business, Drafting, Electricity, Electronics, Food Preparation, Graphic Arts, Health Services, Horticulture, Machine Shop, Piping, Sheet Metal, Visual Communications, and Welding. (Limited admission within subject areas).

(2) Adult Education Specialization
See 73.6

Admission Requirements

See 13.7 of this Calendar.

The normal Faculty of Education admission requirements are:

(1) Senior matriculation, or
(2) Non-matriculated adult status, or
(3) Successful completion of one full year or more at a recognized Alberta post-secondary institution.

Special Entrance Requirements

In addition to the above, vocational education applicants must present evidence of competency in a recognized subject area through documentation of at least a four-year training period and appropriate Journeyman's Certificate or equivalent.

High School Specialization -- Admission for this career goal is limited to specific subject areas taught in Alberta high schools. Normally, evidence of current competency must be presented through the documentation of at least a four year training period and appropriate Journeyman's Certificate or equivalent; and letters of reference outlining employment period, nature of job requirements, and quality of work performed. Equivalency is determined by relevant documents, letters of reference, and in the case of Business applicants, a documented typing speed of not less than 55 NET words per minute on a 5 minute typing test with not more than 8 errors.

In the case of the Combined Schedule where students may be admitted with an incomplete training period, the minimum is 35 high school credits in the area, or successful completion of a one year approved post-secondary training program, or successful completion (with letters of recommendation) of one year of an approved formal industrial/business based training program, in the subject areas outlined above.

Advanced Standing

Subject Area. A minimum of 15 credits and a maximum of 30 credits (one year) of advanced standing is available on the program in recognition of training and experience in the identified industrial or business area.

Training. Successful completion of a four-year training period (or equivalent) including

appropriate certification is a required and integral part of the program.

(1)Normally, students will present documentation of training and Alberta certification and be awarded advanced standing in the Industrial Practicum courses EDIND 223-443.
(2)Students admitted with an incomplete training program will receive credit toward the Industrial Practicum requirements according to the amount of training documented on entry. Students are required to register in the remaining work experience courses and carry out the requirements specified in receiving further credit.

Experience. On entry into the program, students presenting work experience beyond the four-year training period receive additional advanced standing on the basis of 3 credits for each full year of experience, up to a maximum of 15 credits. (pp. F-15, F-16)

When comparing these requirements for a Vocational Education teacher with those of an Industrial Arts teacher one readily observes that technical training for Industrial Arts teacher is obtained from courses taken at university whereas the Vocational Education teacher obtains this training in industry.

The program Vocational Education teachers offer at the high school level in Alberta is best presented in the Industrial Education Manual For Guidance To Teachers, Counsellors and Administrators (1983) which states:

The Industrial Education 12, 22, 32 program is a series of modules which develop competencies leading to seven different career fields.

Entry into a career field may be gained by taking one of several introductory courses. These are:

a.the "12" course designated for each major, or

b.two modules from the Industrial Education "10, 20, 30" series related to the anticipated major, or

c.one half of a "12" course. The other half would be another half "12" or a module from the "10" program. The course would be recorded as Industrial Education "10".

Following the introductory course the student may advance to the major area of study by selecting any number of five credit modules from the courses designated as "22" or "32". The scheduling and sequencing of the modules is the responsibility of the local school personnel but must be in accordance with the regulations pertaining to prerequisites.

A student registered in a second or third level course ("22" or "32") is regarded as taking a major in that course area. Having established a major the student may select courses designated as minors and in this way broaden his practical skill base in a career field or even several career fields. However, students must complete all the preceding modules in a major series (usually six) before taking the 32C module (exceptions: Beauty Culture and Health Services).

The major and minor modules available in each career field and the provision for related studies make it possible to increase the options for the students.

The matrix, in Appendix D, lists the entry level courses, the major areas of study for each career field and the related minors. In addition, a student may select courses from the Industrial Education 10, 20, 30 series, Business Education, Home Economics and/or Work Experience to supplement the career field. (p. 14)

Each major (with three exceptions; Beauty Culture, Food Preparation and Health Services) has the equivalent of 35 - 40 credits available in six 5-credit and one 5 or 10 credit block. (p. 15)

Comparing this information on program offering of Vocational Education to that of Industrial Education 10, 20, 30 one observes that Vocational Education is skill

development with a greater time commitment and Industrial Education 10, 20, 30 is a more general orientation to technical education.

In summary one readily observes that the type of teacher training and program offering at the secondary level make for greater differences than similarities between vocational education and industrial arts teachers.

Teacher Evaluation in Alberta

Historically many developments at the Department of Education occurred which influenced the establishment of the current policy and guidelines for teacher evaluation. Among these developments were: the role of high school inspectors with reference to teacher evaluation; the influence of the professional teachers' association on establishing criteria for teacher evaluation; and research conducted by Alberta Education on teacher evaluation.

The land area today known as Alberta, prior to 1905, was part of the Northwest Territories. Chalmers (1967) indicated that as early as 1842 one of the first schools that was established was a mission school at Lac Ste. Anne. The founder of that school was Father Thibault a Catholic missionary. That school like other schools in the territories was under the control of the Protestant or Roman Catholic church; the agencies responsible for education. Possibly one of the earliest evaluations of education took place in the Northwest Territories at the school at

Lac Ste. Anne. This evaluation was an "inspection" and was conducted by a clergyman to examine the effectiveness of the religious instruction the students received.

In 1886, the Board of Education for the Northwest Territories appointed four school inspectors whose duties were: "to visit the schools at least once a year, examine the pupils, assess the work of the teacher, check on the textbooks, examine the premises, and report on all these factors to the Board of Education" (Chalmers, 1967, p. 367). These inspections were of a religious persuasion rather than being secular.

However, by 1901 the territories established a department of education which in turn appointed school inspectors who were no longer affiliated with a religious denomination. These inspectors were concerned with evaluating both the students' and the teachers' performance in the territorial schools. This practice continued until 1905 when Alberta became a province of Canada and organized its Department of Education. Chalmers (1967) writing on this newly formed department indicated seven inspectors were appointed who were charged with the following duties:

1. Service on the department Board of Examiners;
2. Endorsation of teacher's certificate;
3. Inspection of school work and rating of teachers;
4. Evaluation and approval of applications of teachers for permanent certificates;
5. Teaching in normal schools (from 1891);
6. Approving of government grants;
7. Inspection of school property;
8. Submission of reports to the Department of

Education;
9. Receiving applications from intending teachers;
10. Assisting principals of Union Schools in setting examinations and in arranging practice teaching. (p. 368)

Further changes in the Department of Education continued to evolve and by 1912 the position of superintendent of schools within the Department was established. One of the areas of responsibility for those appointed as superintendent was to serve as a school inspector and the function they performed in that capacity was termed "inspection". This evaluation policy of the Department continued until 1970 when the position of inspector was abolished and was replaced by consultants. It is evident from what Torgunrud (1982) wrote that:

> When the evaluation policy of government was announced it was decided that the name "inspection" would be used to identify the function by which reports would be written on the performance of schools and/or systems. As "inspections" had been conducted since the days when the province was a part of the Northwest Territories until approximately 1970, unfortunate connotations connected with the historical period were transferred to the current function. (p. 1)

The function of evaluation changed drastically when the Department of Education placed the responsibility for teacher evaluation on the local school jurisdictions. ("Certificated Education Staff Evaluation", 1980, p. 1)

In the early 1970's, local school boards began to design instruments to evaluate the performance of their teachers in order to fulfil the mandate imposed upon them by

Alberta Education. About this time, there was concern among educational leaders in the province and among the general public that: the quality of high school graduates entering provincial post-secondary education institutions was falling; the employers were concerned about the quality of high school graduates entering the work force; this public was concerned about the level of achievement of students at all grade levels; and inequity existed in the marks assigned students. (Fenske, Memorandum, April 27, 1979) These concerns began to emerge in other segments of Alberta's society which influenced the Minister of Education, Julian Koziak, to establish the Minister's Advisory Committee on Student Achievement (MACOSA). This Committee was established in October 1976 and was commissioned with the task of reviewing the quality and achievement standards of basic education in Alberta. In addition to its mandate, the legislature requested that the Committee study the effect that the withdrawal of compulsory grade 12 departmental examinations had on the quality of education in the province. (MACOSA Final Report, 1979, p. 1)

Although the MACOSA study dealt primarily with the evaluation of student achievement there is the underlying belief among educators that if students achieve poorly then teachers must be doing something to influence that situation to occur. This is emphasized by Bolton (1973) who states:

> Many educators agree that the most satisfactory criterion measure is the product of performance;

> the emphasis is on the result of outcome of instruction rather than the process of instruction. The major reason for preferring pupil outcomes as the measure of teacher effectiveness is that the goal of teaching is learner development; therefore, the teacher should be accountable by providing evidence that learning has occurred. (p. 118)

Holdaway and Reikie Related Research

Holdaway and Reikie (1977) completed their research on the practices and policies concerning teacher evaluation by local school jurisdictions. To collect data for this investigation these researchers mailed a questionnaire to 100 school superintendents in the province. These researchers found: "a wide variety of practices and policies existed in school systems in Alberta concerning the formal evaluation of teachers" (p. 1). There were a number of factors that helped to produce this variety. Among them were; "the changeover to a complete system of locally appointed superintendents, a less prescriptive 1970 School Act, increased militancy; and increased emphasis upon formative evaluation and self-evaluation activities" (p. 1).

These two researchers found that of the school jurisdictions surveyed 64% had a policy on how frequent tenured teachers were evaluated. Twenty-nine percent of these jurisdictions used a standard form to conduct and report the results of teacher evaluations. (p. 1)

Two of the major purposes for using teacher evaluation

with all public school districts as well as all systems that employed a minimum of 104 teachers according to Holdaway and Reikie were recommending the evaluatee for permanent certification (96%) and awarding a permanent contract (94%). (p. 8) The results of a teacher being evaluated were reported as providing an information data base for dismissing a teacher (83%) or for assisting in making a decision concerning the promotion of the teacher (60%). Of the seven largest systems which provided data for the Holdaway and Reikie study it was reported that results of formal evaluation were used by these districts as a basis for dismissal. Six of these districts used the results of teacher evaluation to promote a teacher. In comparing how these results were used by public and separate districts it is reported "separate districts used them for both purposes (teacher dismissal or teacher promotion) and public districts least" (p. 8).

Less than half (41%) of the reporting districts indicated the results of teacher evaluation were used to record the performance of a teacher who resigned from the service of the school board. (p. 8) Holdaway and Reikie also reported that 40% of the participating school districts indicated the results from teacher evaluation provided the base for administrators when transferring a teacher.

Only 18% of the reporting school superintendents in the Holdaway and Reikie research indicated they used the results

from evaluating teachers to improve the classroom performance of these teachers. The researchers stated that this finding was not practiced in any of the four largest systems. (p. 8)

It would appear from the above that the evaluation of teachers is summative instead of being formative and that teachers are normally evaluated for certification purposes, while an untenured employee, or in a crisis situation. Unfortunately, Holdaway and Reikie did not determine what the attitudes of teachers were toward being evaluated, regardless of the purpose of that evaluation.

The report Certificated Education Staff Evaluation, 1980 was generated by Alberta Education as a result of an in-service seminar conducted a year earlier by the Canadian Education Association. One of the major purposes of the seminar was to discuss the retraining of teachers and administrators. Seminar participants concluded there was "the lack of comprehensive and ongoing evaluation programs of teachers and administrators" (p. 1).

In the evaluation of teachers, participants were of the opinion that it occurred during the first two years of service in a position, during temporary appointment, or in a crisis situation. (Certificated Education Staff Evaluation, 1980, p. 1) It was the general opinion of those who attended the seminar that the major objective for evaluating teachers and administrators was the termination of a

position rather than to improve the performance of the individual. (p. 1)

When the results of the seminar were presented to Dr. E.K. Hawkesworth, Deputy Minister of Education, in January, 1980, he requested that a survey be made of school jurisdictions in Alberta. The purpose of that survey was "to determine current practices and policies involved in the formal evaluation of certificated education staff" (p. 1).

The results of that survey were:

1. Of the jurisdictions responding in 1980, 59% reported having a written evaluation policy but only 47% provided copies of their policy.
2. Of the jurisdictions who reported that they had a written evaluation policy, only 55% reported that they carried out that policy. Of the others, 21% reported that the policy was not being implemented and 24% gave no response.
3. Of the responding jurisdictions, 45% reported that they formally evaluate all teaching staff and 3% reported that they do not evaluate any teaching staff.
4. Teaching staff are the primary recipients of formal evaluation; there is a significantly lower rate of evaluation of other certificated staff.
5. Evaluation of teaching staff occurs primarily in the first year with a jurisdiction -- 90% of staff are evaluated during their first year with a system.
6. The majority (72%) of staff new to the profession are evaluated two or more times during their first year.
7. Tenured staff are evaluated considerably less frequently than are non-tenured staff.
8. Almost one-half of the jurisdictions do not use a standard form for evaluation of certificated staff.
9. In addition to using formal evaluations for making career decisions, such as permanent appointment, promotion, or dismissal, jurisdictions frequently use these evaluations for improving the performance of

all categories of certificated staff.

10. Not all jurisdictions provided the person being evaluated with a copy of the written evaluation; 77% of the jurisdictions stated that they did this.
11. The data revealed that beginning teachers were being evaluated more frequently in 1980 than they had been in 1977.
12. In 1980, an increasing number of tenured teachers, teachers new to the system, and teachers new to teaching were being evaluated on an annual basis, as compared to 1977.
13. Between 1977 and 1980 the use of formal evaluations for the purpose of improving performance has dramatically increased. (18% in 1977 and 83% in 1980)
14. In 1977, only 18% of the jurisdictions reported that they used a standard form for evaluating certificated staff, while 52% did so in 1980. (pp. 16-17)

Between the time that Holdaway and Reikie completed their investigation and Alberta Education completed its survey school districts throughout the province showed continuous interest in teacher evaluation. Not only did these districts exhibit this interest, they also made changes in their policies and procedures toward evaluation of teachers. The number of school jurisdictions who continued to evaluate teachers during their first year of employment continued to be high.

The report continues by stating:

> While minor changes have taken place in most categories the most pronounced shift has occurred in the use of formal evaluations to improve performance. This change occurred in every type of jurisdiction. The total change was from only 18% of jurisdictions reporting this use in 1977 to 83% in 1980. (Certificated Education Staff Evaluation, 1980, p. 15)

The results of the Holdaway and Reikie (1977) study and

Certificated Education Staff Evaluation (1980) were forwarded to the Deputy Minister of Education, Dr. R. Bosetti for his information. It is evident from what Bosetti wrote to Art Cowley, President, Alberta Teachers' Association (ATA) that the policy of the Department of Education toward evaluation would be modified and would be a four pronged approach. In a letter to Cowley, Bosetti wrote "On November 13, 1983, the Honorable David King, Minister of Education, announced a program . . . which eventually would include the evaluation of teachers, schools, school systems, and programs" (Personal Communication, October 18, 1983).

Considerations for Evaluating Teachers

Evaluation of teachers is considered as a very complex process which must be clearly understood if it is to be used correctly. The following topics must be considered, to understand the evaluation process with some degree of knowledge.

Formative and Summative Evaluation

There is not one distinct purpose for evaluating teachers. To clarify this an understanding of two discrete types of teacher evaluation must be understood -- formative and summative evaluation. These two types of evaluation are described in The Alberta Teachers' Association Members Handbook (1982) in this way:

> (a) formative evaluation, designed to perform a developmental function, the results of which are

> used to help improve performance or increase potential for performance through identifying areas of strength or areas requiring improvement and growth; and (b) summative evaluation, designed to perform a judgmental function, the results of which are used for making decisions for purposes of employment (hiring, continuing contract, promotion, transfer, termination) or certification (permanent certification, suspension of certification and decertification). (p. 227)

Formative evaluation may be performed by the individual through self-evaluation or by anyone requested to perform this specific task. Summative evaluation on the other hand is initiated by a superordinate of the teacher.

Who Will Evaluate Teachers?

Addressing the question "who will do the evaluating?" is a very important consideration in the process of teacher evaluation.

Authorities in the field of teacher evaluation such as Goldhammer, Anderson and Krajewski (1980) find an imprecise structure of instructional supervision specifically "the lack of agreement as to who should perform the instructional supervision functions" (p. 18). Cogan (1973) says that very well trained personnel be trained specifically for the instructional supervision process. Literature directed toward the Alberta scene indicates: "central office personnel, principals, Department of Education personnel, A.T.A. or university personnel, vice principals, department heads" (Holdaway & Reikie, 1977, pp. 11-12) should evaluate teachers; Shykora (1984) takes a slightly different position

and believes that "administrative consultants from Alberta Education, journeymen from industry, officers from Apprenticeship and Trade Certification - Alberta Manpower, practicing teachers, a University of Alberta representative and a Northern Alberta Institute of Technology representative" (p. 2) should form the team members to evaluate industrial education teachers; M.E. LaZerte Association of Parents (1983) would like to see teachers in their school evaluated by "parents, students and peers" (p. 23). George Traynor (1984), Associate Superintendent, Edmonton Public Schools, in an address to teachers of M.E. LaZerte Composite High School presented a hierarchy for evaluation of certificated personnel when he stated: "The board evaluated the superintendent, superintendent evaluated the associates, the associates evaluated the principals, the principals evaluated vice-principals, vice-principals evaluated the department heads and now department heads will evaluate the teachers."

Identifying these individuals as teacher evaluators is one thing but whether or not they are qualified to evaluate is an issue which must be thoroughly discussed to resolution. On this issue, Holdaway and Reikie (1977) suggested "A need appears to exist for training in evaluation to be provided for those who have this responsibility" (p. 13).

Certainly, validity and reliability of the evaluation

of teachers are two significant factors which must be considered in determining who will evaluate teachers. The Alberta Teachers' Association, Member Handbook (1982) in addressing this issue believes there are three conditions which influence the validity of teacher evaluation. Closely related to validity is reliability both of which the association describe in this manner:

> A major concern is the validity and reliability of evaluation. In the context of teacher evaluation, validity refers to the degree to which factors evaluated are important to the learning of children and to the successful functioning of the school. A second condition of validity is that an adequate sampling of behavior be observed. A third condition of validity is that the criteria be related to the needs and conditions of the local setting. Reliability, on the other hand, refers to the degree to which different evaluators, agree, using the same criteria, in their evaluations made of a teacher's performance or the degree to which the evaluator agrees with himself on evaluation of the same teacher on different occasions. (p. 227)

Concerns about teacher evaluators have been discussed but there is little in the literature that describes the concerns that evaluators have toward this process. Bolton (1973) did identify concerns that evaluators had after interviewing teacher evaluators. Among these concerns were:

(a) A general lack of certainty regarding the criteria, the measurement process, and the procedures for analysis and interpretation of data.
(b) The evaluator's dislike of being in a position to manipulate or adversely affect other people's lives.
(c) A fear of precipitating an unpleasant reaction on the part of the person being evaluated. This reaction then prevents a relationship conducive to helping the

individual improve.

(d) A lack of ability to cope with the weaknesses of the individual in terms of organizational needs and his ability to improve. This is sometimes linked with a failure to communicate to the individual the necessity of dealing with both individual and organizational problems.

(e) A failure to see the relationship of evaluation of others to the purposes of the evaluator.

(f) An inability to organize time so that adequate observations can be made. (p. 96)

Many of these concerns that the evaluators described may be effectively dealt with if they had a clearer understanding of various models for teacher evaluation. These concerns could possibly be negated if the evaluator was adequately prepared to evaluate teachers. Models for teacher evaluation promoted by leading authorities will be discussed in a subsequent section of this chapter.

What Will be Evaluated?

Another important consideration that must be looked at in the process of teacher evaluation is the issue of "What will be evaluated?". Superintendents who furnished data for the Holdaway and Reikie (1977) Study identified twelve areas which should be considered when teachers are evaluated. These twelve areas were:

(1) Organization/preparation of lessons/objectives
(2) Classroom control
(3) Rapport with students (good communication)
(4) Classroom presentation/performance
(5) Knowledge of subject matter
(6) Attitude and personal qualities
(7) Classroom climate
(8) Rapport with colleagues

(9) Maintenance of records
(10) Professional development/self-improvement
(11) Ability to recognize student differences
(12) Empathy with students (p. 10)

The above list is certainly not all encompassing. Consideration should also be given to items identified by the American Association of School Administrators in an article Evaluating Educational Personnel (1982). They suggest the following items should be evaluated:

- Classroom management
- Teacher/pupil relationships
- Staff relationships
- Preparation of teaching plans
- Effective use of training materials
- Interpersonal skills

Two characteristics were used in evaluations most of the time, but not to the extent of those listed above:

- Cooperation and
- Professional improvement.

Two additional characteristics were used by more than 75 percent of those replying, but not as often as the other items:

- Attendance and
- Public relations/communications skills.

(pp. 21-22)

Standards in Evaluation

Evaluation is measurement. To measure one must utilize a "standard" i.e., an item with which to compare. One might wonder why this component of evaluation, namely standards, is of prime importance in evaluation? Alberta Educations' teacher evaluation policy utilizes the term "standard" many times throughout their policy therefore, a

clear understanding must be known.

The Joint Committee on Standards for Educational Evaluation (1981) defined standards as "principles commonly agreed to by people engaged in the professional practice of evaluation for the measurement of the value or the quality of an evaluation" (p. 12). The reasons why we should use standards in evaluation has best been summed up in an article by Stufflebeam and Madaus (1983):

> a common language to facilitate communication and collaboration in evaluation, a set of general principles for dealing with a variety of evaluation problems, a conceptual framework by which to study evaluation, a set of working definitions to guide research and development on the evaluation process, a public description of the state of the art in educational evaluation, a basis for accountability by evaluators, and an aid to developing public credibility for the educational evaluation field. (p. 396)

Models of Evaluation

The literature reveals many models of evaluation; however, a study by Duncan (1984) highlights the most recently developed models. He states:

> In recent years a number of models of teacher evaluation have been developed which involve the establishment of goals and some level of teacher input. The Manatt "Mutual Benefit Evaluation" (Manatt, Palmer & Hibblebaugh, 1976), and Redfern's (1980) "Management by Objectives" models are examples. The flexible, multigoal model which has achieved prominence today is the "Clinical Supervision" model initially developed by Goldhammer (1969) and Cogan (1973). (p. 3)

Many authors have written books which focus on the clinical supervision model of teacher evaluation. Among the

authors who have written on this topic and also provide a definition for the term clinical supervision are: Cogan (1973), Flanders (1976), Sergiovanni and Starratt (1979) and Goldhammer, Anderson and Krajewski (1980).

Cogan (1973) in Clinical Supervision, provides this definition for clinical supervision:

> the rationale and practice designed to improve the teacher's classroom performance. It takes its principle data from the events of the classroom. The analysis of these data and the relationship between teacher and supervisor form the basis of the program, procedures, and strategies designed to improve the students' learning by improving the teacher's classroom behavior. (p. 9)

Flanders (1976) definition for clinical supervision contains many of the elements of the evaluation process that Cogan includes in his definition. Flanders' believes that clinical supervision is:

> a special case of teaching in which at least two persons are concerned with the improvement of teaching and at least one of the individuals is a teacher whose performance is to be studied. . . . [It] seeks to stimulate some change in teaching, to show that a change did, in fact, take place, and to compare the old and new patterns of instruction in ways that will give a teacher useful insights into the instructional process. (p. 19)

To Sergiovanni and Starratt (1979) clinical supervision is "face-to-face encounters with teachers about teaching, usually in classrooms, with the double-barreled intent of professional development and improvement of instruction" (p. 19). Goldhammer, Anderson and Krajewski (1980) provide a more inclusive definition for clinical supervision. These

authors believe that there are at least three elements involved in clinical supervision all of which impact on the teacher for the expressed purpose of improving the performance of the teacher and the students' learning. These elements are included in the following quotation provided by these authors. Clinical supervision is:

> that phase of instructional supervision which draws its data from first-hand observation of actual teaching events, and involves face-to-face (and other associated) interaction between the supervisor and teacher in the analysis of teaching behaviors and activities for instructional improvement. (pp. 19-20)

It should be evident that these definitions have several elements in common. Firstly, among them is a thread of commonality which indicates that a relationship exists between the teacher and the supervisor which is developed during the evaluation process. Secondly, as a result of personal interaction between the two parties there should be improvement of the teachers performance in the classroom. Lastly, as a result of increased teacher performance in the learning environment, students should show improvement in their learning. Also, increased teacher performance in the instructional process of the teacher should show improvement.

Clinical supervision is by no means an expenditious way that can be used to evaluate a teacher or the teaching process of a teacher, as a matter of fact, no part or element of the clinical supervision process should be taken

either lightly nor should it be excluded. To gain a clear understanding of the cycle of supervision one must focus in detail on the following eight phases that were identified by Cogan (1973); (1) establishing the teacher-supervisor relationship; (2) planning with the teacher; (3) planning the strategy of observation; (4) observing instruction; (5) finalizing the teaching-learning process; (6) planning the strategy of the conference; (7) the conference; and (8) renewed planning. Cogan (pp. 10-12) It is evident from what Cogan has written that certain of these phases are collaborative, others are teacher centered and still others are supervisor centered. All for the betterment of the performance of the teacher that will be detected in the performance of the student.

A model of teacher evaluation, for instance the clinical supervision model requires many considerations before it can be implemented. Townsend (1985) in a position paper prepared for Alberta Education discussed a modified clinical supervision model. The Townsend model places on teachers and administrators who both must be involved in all phases of implementation, collaboration and commitment in order to establish the most effective teacher evaluation system possible; training of all those involved in the process must occur during key stages of the development and implementation of the evaluation process; and lastly a demonstrated commitment to the priorities of the

implementation by key leadership administrators must occur.

Another model of teacher evaluation is School Management by Objectives (School MBO) initially developed by Odiorne (1965). In Management by Objectives -- A System of Managerial Leadership Odiorne provides detail on the concept of managing a school by the objectives established for that school. Approximately ten years later, Lewis in 1974 elaborated on the work of Odiorne when he had published a series of "How to Books" on School MBO. In defining the term School MBO Lewis believes that the degree of effectiveness of each educator is closely related to accountability and increased student performance. Lewis (1974) defined School MBO as a process:

> whereby all school personnel identify their common and uncommon goals as a basis for defining successful criteria for evaluating the degree of goal attainment. These measures are then used to ascertain the degree of effectiveness of each educator and to judge the extent of accountability of our schools in terms of increased student performance. (p. 35)

The model for School MBO according to Lewis (1974) should include the following components for the evaluation cycle to be effective: objectives or standards of performance to be achieved; monitoring of performance by administrators and supervisors; attainment of objectives to determine performance achieved; and corrective action to be initiated to achieve the objective. (pp. 68-69)

Another model for teacher evaluation is the mutual benefit evaluation model formulated by Manatt. This model

is best described by Manatt, Palmer and Hidlebaugh (1976) who see this model as including:

1. Self-appraisal for familiarization and preparation for the post-conference.
2. Pre-observation conferences to discuss instructional objectives, methods, and the learners.
3. Classroom observations--two or three periods per cycle.
4. Post-observation conferences to discuss critical classroom incidents, progress, and to exchange questions.
5. Agreement on a plan of action.
6. Time to improve, help to improve, and mutual (appraiser-appraisee) monitoring of change.
7. Report of the summary evaluation to appraisee and to superiors. (pp. 23-24)

These authors in Evaluating Teacher Performance With Improved Rating Scales write that a 30 item evaluation instrument should be used with the mutual benefit evaluation model to evaluate teachers.

In a technical report prepared by Lawton, Hickcox, Leithwood and Musella (1986) for the Ontario Ministry of Education, these researchers identify seven models for the evaluation of teachers. However, the three models previously described are the most prominently used today. The professional literature on teacher evaluation reveals that models have been used by educators as a basis for the development of evaluation systems by numerous school jurisdictions throughout North America. These models, however, have been either modified or drastically changed by personnel of these jurisdictions to meet the needs of a particular school or school system.

Some school jurisdictions use instruments as a major component of their evaluation process. Bolton (1973) lists five characteristics that an instrument to evaluate teachers should have. Among the characteristics are:

(a) relevance - the extent to which the instrument measures a factor that is considered important
(b) reliability - the consistency or reproducibility of the measure, ie. whether the instrument maintains its stability from one application to the next
(c) validity - whether the instrument measures the behavior, object, or event it was intended to measure
(d) fidelity - the degree to which the response to the instrument parallels the true or actual performance (e.g.) skill tests in physical education have greater fidelity than pencil and paper tests)
(e) ease of administration - the practicality of the instrument in the evaluation, i.e., its availability, scoring ease, etc. (p. 112)

In addition to considering the characteristics to be used when selecting a measuring instrument the administrator or supervisor must give consideration to a number of practical restraints? Bolton (1973) considered the restraints to be, "the cost of acquiring the data, the time it will take to gather the data, the availability of adequate data sources, and the resistance of sources to evaluation" (p. 129).

There are a number school jurisdictions in Alberta using evaluation instruments as a component of their evaluation. After reviewing the literature to determine the best instruments to use for teacher evaluation the researcher found these instruments to be as varied as snowflakes falling in a blizzard. To make a judgement as to

the best instruments to use for evaluation would be ludicrous.

Many approaches to teacher evaluation may be considered by school jurisdictions in Alberta. Some of these are: student evaluation, tests of student performance, simulated teaching, self-evaluation, supervisor observation, peer evaluation, visiting team of experts and finally observer rating tools. Which of these approaches is best? This depends entirely on the evaluation policy of local school jurisdictions. A comparative chart identifying these various approaches to teacher evaluation was developed by O'Hanlon and Mortesen in 1977. They identify the strengths, weaknesses, conditions for effective use, nature of evidence produced and purposes for which most highly appropriate for each of the aforementioned approaches.

Perceptions Toward Teacher Evaluation

Prior to focusing on teachers' perceptions toward evaluation one should initially look at recommendations researchers and authors express about teacher involvement in teacher evaluation programs.

Many noted authors and researchers in the field of teacher evaluation in the Alberta scene indicate that one of the requirements of an effective evaluation program is that teachers have input prior to implementation of a successful evaluation program. Mireau (1986) states: "The process of supervising instruction involves cooperation between the

administrator and the teacher in order to reach the mutual goal of improved instruction and the optimum achievement of students" (p. 1). Yuzdepski and Elliot (1985) state "if a program of teacher evaluation is to be successful, the purposes of the program must be identified, discussed, and agreed upon by all who are involved in the process" (p. 8). Duncan (1984) in a report Teacher Evaluation Practices in Alberta recommends "that school boards involve classroom teachers in inservice programs so that they become more knowledgeable, and more committed to the process of formal evaluation" (p. 121).

In a research project, which focused on investigating the implementation of a new teacher evaluation program in five secondary schools of the Lethbridge School District No. 51, Townsend (1984) says "there is evidence that considerable teacher input from the district at large influenced final policy statements" (p. 27). Townsend goes on to indicate "it was apparent that different supervisory processes were appropriate for different classroom situations, different career levels of teachers, and different levels of knowledge and ability of teachers" (p. 43). The literature goes on to say that teachers and supervisor's reactions to the Lethbridge School District's process of evaluation has been very positive.

The information provided in the preceding two paragraphs supports the beliefs that teacher involvement is

essential to quality evaluation programs. However, the researcher found by doing an extensive literature review that very little information is available which gives the teacher's point of view towards teacher evaluation.

Duncan (1984) used the Modified Acheson/Shinn instrument for a research study which included a random sampling of 51 teachers who taught grades 1-12 in Alberta. One of the conclusions in this report stated: "This pattern of responses by teachers suggests to the researcher that teachers are anxious about the purposes of formal teacher evaluation, and, notwithstanding the data presented earlier, perceive the process as punitive" (p. 84).

A major study which included 4082 teachers' perceptions towards various aspects of the teacher evaluation process was initiated by Lawton, Hickcox, Leithwood and Musella in 1986 in Ontario. The study provided teachers' perceptions toward teacher evaluation under the following categories: preparation for evaluation, data collection, reporting and follow-up, evolution of policy and impact of policy and practice. Some of the findings reported in this study were: the majority of teachers were involved with setting objectives for their evaluations and focused on overall performance, not just their work in the classroom; specific notes taken by appraisers are the preferred method of evaluation for teachers, however, teachers suggest more use should be made of self-evaluation questionnaires and less

use of checklists; a written evaluation report form under several headings were used most frequently however, ratings of specific teacher activities or quality of the teachers work were seldom reported; teachers reported that they were generally satisfied with the procedures used to develop teacher evaluation policies although they indicated they would prefer greater participation; 3% of the teachers indicated substantial improvement in their performance as a result of their appraisal; lastly, 80% of the teachers indicated that the judgement of their appraisers and the nature of the evaluation process were fair.

A study titled Teacher Perceptions of Ideal and Actual Supervisory Procedures Used by California Elementary Principals by Shinn (1976) uses a 32 item questionnaire to solicit responses from teachers as to how teachers perceive their supervisors techniques for evaluating teachers. Although this questionnaire provides teachers with the opportunity to express their perceptions concerning the specific items in the questionnaire, no open ended questions are provided to allow teachers to express their perceptions freely.

In support of the researchers contention that little written information has been collected from the teachers point of view towards teacher evaluation Duncan (1984) included in the recommendations for further study section of his research report, that future studies should examine the

teacher perspective concerning teacher evaluation in more depth.

CHAPTER III

ANALYSIS OF DATA

Introduction

The previous chapter included a review of the literature and research related to the topic of teacher evaluation. This chapter presents an analysis of data collected with the research instrument from the 282 educators in the province who returned completed instruments.

It will be recalled from the research design described in chapter I that for the purposes of this study the population included three discrete groups; high school administrators (72), non-vocational education teachers at the secondary school level (307) and vocational education teachers (21). From this population of 400, 282 returned completed questionnaires. As questionnaires were received the data provided were transferred to coding sheets. The research data on the coding sheets were then key punched on to 80 column cards by personnel of the Department of Educational Research Services, University of Alberta. For the benefit of the reader the research questionnaire was a two part instrument. The first part consisted of 17 questions that provided data on the demographics of the research population. The second part included (23) questions that asked participants to indicate their

perceptions toward the process of teacher evaluation. For this part of the instrument a 5-point Likert scale was used.

The following statistical procedures were used in the data analysis.

Statistical Procedures

Frequency distributions in the form of a percent using crosstabulation were generated for questions 1-13, 37 and 38. To secure this statistical information the Initial Frequencies program available from Division of Educational Research Services, University of Alberta was used. A sample of this type of analysis can be found in Appendix E, page 154.

Linguistic analysis was conducted for questions 39 and 40 to identify the major themes of responses given by participants to these open-ended questions.

Questions 14 through 36 were grouped into 5 clusters. Moore (1983, p. 208) recommends this procedure to increase the reliability of questionnaire items. The questions for each cluster were devised from five common themes which the researcher deemed important to the research. Each cluster was then assigned a title with questions grouped under each theme. Attention must be drawn to the reader that question 14 was used in both Clusters III and V. Also, question 23 was used in both Clusters III and IV. These two questions were appropriate for each of the themes in these clusters

therefore they were used in this manner. The titles for the five clusters and their questions were:

I METHODS OF EVALUATION

questions 15, 17, 20, 28 and 29

II EXTRANEOUS INFLUENCES TO EVALUATION

questions 16, 21, 26, 31 and 32

III EVALUATORS

questions 14, 18, 19, 22, 23, 24 AND 25

IV FORMATIVE EVALUATION

questions 23, 27 and 30

V DEGREE OF SATISFACTION WITH EVALUATION

questions 14, 33, 34, 35 and 36

The analysis of variance and Scheffé procedures data were prepared for this study through the cooperation of personnel of the Division of Educational Research Services, who used the ANOVA and Scheffe' command from the Statistical Package for the Social Sciences-X (SPSS-X).A sample of these types of analysis can be found in Appendix E, page 156.

The mean scores for each of the groups, were subject to one way analysis of variance (ANOVA) for each of the five clusters to test the three null hypotheses for statistically significant differences. This procedure is generally applied when a researcher has data on a single variable (each cluster) from two or more groups. The Scheffe' procedure of testing differences between all possible pairs of means was applied to the analysis of data to identify

pairs of groups that were significantly different. A 0.05 level of significance was established to either reject, or accept, each null-hypothesis.

To assist in reporting the data, this chapter is divided into two sections: General Information, questions 1-13, 37-40 and Personal Perceptions, questions 14-36.

General Information Questions

The general information variables consisted of personal and professional data that would provide a composite picture of those who participated in the investigation. These data are presented in tabular form for ease of analysis and observability of data for comparative purposes.

For the purpose of this study general information included personal and professional data which were classified as demographic variables. Among these variables were: years of teaching experience; years at present school; gender; age; courses currently taught and highest university degree attained.

Teaching Experience

The following question was asked to determine the number of years of teaching experience that each participant had at the time of the study.

The Question:

1. YEARS OF TEACHING EXPERIENCE (INCLUDING THIS YEAR).

[ ] 1-2	[ ] 3-4	[ ] 5-6
[ ] 7-8	[ ] 9-10	[ ] 11-17
[ ] OVER 17		

Data collected with this question are shown in Table 6. These data indicate that of the 282 participants 219 or 77.7% had over 9 years of teaching experience. Of those who returned completed instruments 39% or 110 had over 17 years of teaching experience. A further breakdown of participants with over 17 years of teaching experience shows that the

Table 6

Teaching Experience and Position of Participants

(N = 282)

YEARS OF EXPERIENCE	POSITION							
	ADM[1]		NON-VOC[2]		VOC[3]		TOTAL	
	No.	%	No.	%	No.	%	No.	%
1-2			12	4.3	1	.4	13	4.6
3-4			8	2.8			8	2.8
5-6			17	6.0			17	6.0
7-8	2	.7	21	7.4	2	.7	25	8.8
9-10	3	1.1	27	9.6	1	.4	31	11.0
11-17	19	6.7	55	19.5	4	1.4	78	27.7
17+	34	12.1	70	24.8	6	2.1	110	39.0
TOTAL	58	20.6	210	74.5	14	5.0	282	100.00

1 ADM = ADMINISTRATORS
2 NON-VOC = NON-VOCATIONAL EDUCATION TEACHERS
3 VOC = VOCATIONAL EDUCATION TEACHERS

non-vocational education teacher group represented the largest number 70, followed by the administrator group with 34 and the vocational education teacher group with only 6. This low number of teachers for the vocational education group could be partly attributed to the fact that vocational education has been in the secondary schools in Alberta since 1963 while the core courses have been part of the secondary school curriculum since 1905. Also, vocational education teachers have spent a number of years in the world of work prior to entering the teaching profession. Additional data in this table show that 25 individuals had 7-8 years experience, 17 had 5-6 years experience, 8 had 3-4 years experience and the remaining 13 with only 1-2 years of teaching experience. These data also show that most of those involved in the research could be considered as either experienced teachers or administrators.

Tenure at Present School

This question was used to determine the number of years of teaching experience each participant had accumulated at their current school.

The Question:

2. YEARS AT YOUR PRESENT SCHOOL (INCLUDING THIS YEAR).

[ ] 1-2	[ ] 3-4	[ ] 5-6
[ ] 7-8	[ ] 9-10	[ ] 11-17
[ ] OVER 17		

The data collected with this question are displayed in

Table 7 and indicate that 123 of the 282 participants had between 1 and 6 years teaching experience at their present school. Teachers and administrators with more than 11 years experience in the profession represented 35.1% (99/282) of the participants. The remaining 60 participants had between 7 to 10 years experience. These data show the professional

Table 7

Tenure of Participants at Present School

(N = 282)

YEARS OF EXPERIENCE	POSITION							
	ADM[1]		NON-VOC[2]		VOC[3]		TOTAL	
	No.	%	No.	%	No.	%	No.	%
1-2	4	1.4	30	10.6	3	1.1	37	13.1
3-4	8	2.8	29	10.3	1	.4	38	13.5
5-6	8	2.8	40	14.2			48	17.0
7-8	7	2.5	21	7.4	2	.7	30	10.6
9-10	6	2.1	23	8.2	1	.4	30	10.6
11-17	18	6.4	36	12.8	4	1.4	58	20.6
17+	7	2.5	31	11.0	3	1.1	41	14.5
TOTAL	58	20.6	210	74.5	14	5.0	282	100.0

1 ADM = ADMINISTRATORS
2 NON-VOC = NON-VOCATIONAL EDUCATION TEACHERS
3 VOC = VOCATIONAL EDUCATION TEACHERS

maturity of those involved in the research which could also

be classified as being a relatively young group of professionals who were also professionally mature. See Table 9, page 82.

Gender of Participants

To determine gender of those involved in this study question 3 asked:

3. SEX: [ ] FEMALE [ ] MALE

Data collected with this question comprise the information in Table 8. For the non-vocational education teacher group of 210, 131 were males and 79 female. The male group almost doubles the female group of teachers for

Table 8

Gender of Those Involved in Research

(N = 282)

	POSITION							
GENDER	ADM[1]		NON-VOC[2]		VOC[3]		TOTAL	
	No.	%	No.	%	No.	%	No.	%
FEMALE	9	3.2	79	28.0	1	.4	89	31.6
MALE	44	17.4	131	46.5	13	4.6	193	68.4
TOTAL	58	20.6	210	74.5	14	5.0	282	100.0

1 ADM = ADMINISTRATORS
2 NON-VOC = NON-VOCATIONAL EDUCATION TEACHERS
3 VOC = VOCATIONAL EDUCATION TEACHERS

this cohort. It is evident from data in this table that the

majority of vocational education teachers were male 13 compared to 1 female. Also, there were more male administrators, than there were female administrators, 49 to 9. Data from this table show that those involved in the research were mainly male teachers or administrators.

Age of Research Participants

The age of participants was to determine by asking question 4.

The question:

4. AGE: [ ] UNDER 25 [ ] 25-29 [ ] 30-34
[ ] 35-39 [ ] 40-44 [ ] 45-49
[ ] 50-54 [ ] 55-59 [ ] 60 OR OVER

It can be seen from data in Table 9 that of the 282 participants, 208 or 74% were between 30 and 49 years of age. Teachers and administrators who were 25 years of age represented 2.8% (8/281) of the aggregate population.

There were 47 members of the research sample whose range of age was from 50 to over 60. Of this number there were six vocational education teachers. At the other extreme there were only 36 teachers in the non-vocational class who were between 25 and 29 years of age.

Courses Taught

To determine the high school subjects each participant taught question 5 was prepared.

The Question:

5. YOU CURRENTLY TEACH AT LEAST ONE COURSE IN:
   [ ] SCIENCE
   [ ] BUSINESS EDUCATION
   [ ] PHYSICAL EDUCATION
   [ ] OTHER CORE ACADEMIC SUBJECTS
   [ ] VOCATIONAL EDUCATION 22, 32, 25, 35,
   [ ] NONE

Table 9

Age of Research Participants

(N = 281)

	POSITION							
AGE	ADM[1]		NON-VOC[2]		VOC[3]		TOTAL	
	No.	%	No.	%	No.	%	No.	%
25-			8	2.8			8	2.8
25-29			18	6.4			18	6.4
30-34	4	1.4	43	15.3	2	.7	49	17.4
35-39	8	2.8	45	16.0	2	.7	55	19.6
40-44	23	8.2	38	13.5	2	.7	63	22.4
45-49	12	4.3	27	9.6	2	.7	41	14.6
50-54	5	1.8	14	5.0	2	.7	21	7.5
55-59	6	2.1	12	4.3	2	.7	20	7.1
60+			4	1.4	2	.7	6	2.1
TOTAL	58	20.6	209	74.4	14	5.0	281*	100.0

1 ADM = ADMINISTRATORS
2 NON-VOC = NON-VOCATIONAL EDUCATION TEACHERS
3 VOC = VOCATIONAL EDUCATION TEACHERS
* One participant did not respond to this question

Data collected with this question were used to organize Table 10. These data indicate a total of 338 responses to this question. For the administrator cohort of 68, 23 or 33.8% taught core academic subjects, 26.4%

Table 10

Teaching Responsibility of Participants

(N = 282)

SUBJECT	POSITION						
	ADM[1]		NON-VOC[2]		VOC[3]		TOTAL
	No.	%	No.	%	No.	%	No.
SCIENCE	12	4.3	50	17.7			62
CORE ACADEMIC	23	8.2	129	45.7			152
BUSINESS	6	2.1	24	8.5			30
VOCATIONAL	1	.4	5	1.8	14	5.0	20
PHYSICAL EDUCATION	8	2.8	30	10.8			38
NONE	18	6.4	18	6.4			36
TOTAL	68		256		14		338*

1 ADM = ADMINISTRATORS
2 NON-VOC = NON-VOCATIONAL EDUCATION TEACHERS
3 VOC = VOCATIONAL EDUCATION TEACHERS

* This number is greater than 282 because some administrator and non-vocational teacher participants taught more than one subject.

(12/68) taught a course in science and 18 of the 68 did not have any teaching responsibilities.

Of the 210 participants who made up the non-vocational teacher cohort 256 responses were received for question 5. Data from these individuals indicated that 129/256 taught core academic; 50/256 taught courses in science. Of this cohort 23.0% (59/256) taught business, vocational or physical education. Data from the vocational education teacher cohort indicates 100% (14/14) were teaching vocational education courses only. Science as a subject area was singled out for identification for its laboratory activities which are an integral part of this course.

University Degree Earned

Question 6 asked for members of the research to identify the highest university degree they attained. The Question:

6. YOUR HIGHEST UNIVERSITY DEGREE ATTAINED WAS: _____

Data in Table 11 show that of 282 administrators and teachers who provided data for the study 218 or 77.3% had a Bachelor Degree. Forty-six or 16.3% of the participants had a Masters Degree. Of the 282 participants 13 had a diploma and 2 had completed the requirements for a doctorate.

It is evident from data in this table that vocational education teachers after receiving their initial degree do not pursue study toward an advanced degree. The sample size for this cohort, although small, proportionately has more

masters degrees than the non-vocational education teacher cohort. One might expect the proportion to be higher for the administrator group.

Vocational Education Courses

Question 7 was written to determine if vocational courses were currently being taught at the school where research participants taught.

Table 11

University Degree Earned by Research Participants

(N = 282)

UNIVERSITY DEGREE	POSITION							
	ADM[1]		NON-VOC[2]		VOC[3]		TOTAL	
	No.	%	No.	%	No.	%	No.	%
BACHELOR	21	11.0	175	62.1	12	4.3	218	77.3
GRADUATE DIPLOMA	5	1.8	8	2.8			13	4.6
MASTERS	20	7.1	24	8.5	2	.7	46	16.3
DOCTOR OF PHILOSOPHY	1	.4	1	.4			2	.7
OTHER	1	.4	2	.7			3	1.1
TOTAL	58	20.6	210	74.5	14	5.0	282	

1 ADM = ADMINISTRATORS
2 NON-VOC = NON-VOCATIONAL EDUCATION TEACHERS
3 VOC = VOCATIONAL EDUCATION TEACHERS

The Question:

7. VOCATIONAL 22, 32 OR 25, 35 COURSES ARE TAUGHT IN YOUR SCHOOL.

[ ] YES [ ] NO

From data in Table 12 it is evident that by the small margin of 7.2% vocational education courses were offered in schools of those involved in the study. A total of 53.6% (143/267) of the participants indicated vocational courses were taught in their schools. Conversely, 46.4% (124/282) said that vocational courses were not being taught in their school.

Table 12

Vocational Education Courses Taught in Participants School

(N = 267)

VOCATIONAL COURSES TAUGHT	POSITION							
	ADM[1]		NON-VOC[2]		VOC[3]		TOTAL	
	No.	%	No.	%	No.	%	No.	%
YES	30	11.2	100	37.5	13	4.9	143	53.6
NO	25	9.4	98	36.7	1	.4	124	46.4
TOTAL	55	20.6	198	74.2	14	5.3	267*	100.0

1 ADM = ADMINISTRATORS
2 NON-VOC = NON-VOCATIONAL EDUCATION TEACHERS
3 VOC = VOCATIONAL EDUCATION TEACHERS
* 15 participants elected not to respond to this question.

Involvement in Development of a Teacher Evaluation Program

To determine if participants were involved with the development of a teacher evaluation program question 8 asked:

AS A SCHOOL ADMINISTRATOR OR TEACHER WERE YOU DIRECTLY INVOLVED IN THE DEVELOPMENT OF A TEACHER EVALUATION PROGRAM?
[ ] YES [ ] NO

Of the 282 participants 278 responded to this question. Of these, 220 indicated that they had not been involved in the development of a teacher evaluation program. The

Table 13

Participants Involvement in Development of a Teacher Evaluation Program

(N = 278)

EVALUATION PROGRAM INVOLVEMENT	POSITION							
	ADM[1]		NON-VOC[2]		VOC[3]		TOTAL	
	No.	%	No.	%	No.	%	No.	%
YES	30	10.8	23	8.3	5	1.8	58	20.9
NO	27	9.7	184	66.2	9	3.2	220	79.1
TOTAL	57	20.5	207	74.5	14	5.0	278*	100.0

1 ADM = ADMINISTRATORS
2 NON-VOC = NON-VOCATIONAL EDUCATION TEACHERS
3 VOC = VOCATIONAL EDUCATION TEACHERS
* Four participants elected not to provide a response.

remaining 58 were involved. An interesting piece of information from this table is that 27 of the 57 administrators who responded to this question indicated they had not been involved in developing a teacher evaluation program. These data are found in Table 13.

Self Evaluation

The Question:

9. AS A SCHOOL ADMINISTRATOR OR TEACHER DO YOU USE A SELF-EVALUATION INSTRUMENT FOR SELF IMPROVEMENT?
[ ] YES [ ] NO

This question was prepared to determine the number of participants who used a self-evaluation instrument to improve their performance as an administrator or as a

Table 14

Participants Use of Self-Evaluation Instrument

(N = 278)

SELF EVALUATION INSTRUMENT	ADM[1]		NON-VOC[2]		VOC[3]		TOTAL	
	No.	%	No.	%	No.	%	No.	%
YES	36	12.9	122	43.9	9	3.2	167	60.1
NO	21	7.6	85	30.6	5	1.8	111	39.9
TOTAL	57	20.5	207	74.5	14	5.0	278*	100.0

1 ADM = ADMINISTRATORS
2 NON-VOC = NON-VOCATIONAL EDUCATION TEACHERS
3 VOC = VOCATIONAL EDUCATION TEACHERS
* 278 participants elected to answer the question.

teacher.

Table 14 data show that of the 278 participants who supplied a response to this question over half or 167 (60.1%) used a self-evaluation instrument to improve their teaching or administrative performance. The remaining 39.9% did not use this type of instrument. By examining the percentage of each cohort for those who responded "yes" it is evident that no cohort used self evaluation instruments more than another.

Table 15

Teachers in Participants School Evaluated by Same Evaluation Process

(N = 279)

EVALUATION PROCESS	POSITION							
	ADM[1]		NON-VOC[2]		VOC[3]		TOTAL	
	No.	%	No.	%	No.	%	No.	%
YES	48	17.2	172	61.6	11	3.9	231	82.8
NO	9	3.2	36	12.9	3	1.1	48	17.2
TOTAL	57	20.4	208	74.6	14	5.0	279*	100.0

1 ADM = ADMINISTRATORS
2 NON-VOC = NON-VOCATIONAL EDUCATION TEACHERS
3 VOC = VOCATIONAL EDUCATION TEACHERS
* Not all participants responded to this question.

Same Evaluation Process

To determine if all teachers in each of the participants' schools were evaluated using the same evaluation process regardless of the subject area taught question 10 stated:

The Question:

10. TO THE BEST OF YOUR KNOWLEDGE ALL TEACHERS IN YOUR SCHOOL ARE EVALUATED BY THE SAME EVALUATION PROCESS.
[ ] YES [ ] NO

Over 82% of those involved in the research, indicated evaluators in their school used the same instrument when evaluating teachers, regardless of subject area taught. Other data in Table 15 indicate a similar high percentage of affirmative answers was given by each cohort.

Formal Evaluation

To determine if participants were formally evaluated by administrative personnel in their schools question 11 asked:

The Question:

11. HAVE YOU BEEN FORMALLY EVALUATED? (DO NOT INCLUDE EVALUATION FOR PERMANENT CONTRACT OR PROFESSIONAL TEACHING CERTIFICATE.)
[ ] YES [ ] NO

Data in Table 16 show that of the 282 participants 50 administrators, 185 non-vocational teachers and 10 vocational education teachers indicated that they were formally evaluated. These 245 individuals represented 86.9% of those involved in the research. The remaining 13.1% had not been formally evaluated. These data can be interpreted

to mean that teacher evaluation is being conducted in the schools of the province to fulfill the Department of Education requirement which was established in 1984.

Table 16

Formal Evaluation of Participants

(N = 282)

FORMAL EVALUATED	POSITION							
	ADM[1]		NON-VOC[2]		VOC[3]		TOTAL	
	No.	%	No.	%	No.	%	No.	%
YES	50	17.7	185	65.6	10	3.5	245	86.9
NO	8	2.8	25	8.9	4	1.4	37	13.1
TOTAL	58	20.6	210	74.5	14	4.9	282	100.0

1 ADM = ADMINISTRATORS
2 NON-VOC = NON-VOCATIONAL EDUCATION TEACHERS
3 VOC = VOCATIONAL EDUCATION TEACHERS

Evaluators Who Completed Evaluation

Question 12 was developed and is related to question 11 because it determines the evaluators responsible for conducting the evaluation process.

The Question:

12. IF YES, PLEASE IDENTIFY THE INDIVIDUAL/INDIVIDUALS WHO COMPLETED THE EVALUATION.

CENTRAL OFFICE PERSONNEL [ ]
SCHOOL PRINCIPAL [ ]
SCHOOL ASSISTANT PRINCIPAL [ ]

DEPARTMENT HEAD [ ]
ALBERTA EDUCATION PERSONNEL [ ]
OTHERS (SPECIFY) _____

The data collected with this question were used to organize Table 17. These data show that some of the

Table 17

Evaluators Who Completed Evaluation For Each Participant

(N = 282)

PERSON CONDUCTING EVALUATION	POSITION						
	ADM[1]		NON-VOC[2]		VOC[3]		TOTAL
	No.	%	No.	%	No.	%	No.
CENTRAL OFFICE PERSONNEL	31	11.0	79	28.0	1	.4	111
PRINCIPAL	28	9.9	112	39.7	2	.7	142
ASSISTANT PRINCIPAL	11	3.9	76	27.0	4	1.4	91
DEPARTMENT HEAD	1	.4	29	10.3	5	1.8	35
ALBERTA EDUCATION PERSONNEL	3	1.1	7	2.5	1	.4	11
TOTAL	84		334		13		431*

1 ADM = ADMINISTRATORS
2 NON-VOC = NON-VOCATIONAL EDUCATION TEACHERS
3 VOC = VOCATIONAL EDUCATION TEACHERS
* Because of multiple answers given the total number is greater than 282.

participants were evaluated by more than one evaluator consequently the total number of responses was 421. For the administrator cohort the data indicated that their evaluators consisted of three groups, namely central office personnel, school principals or school assistant principals. The non-vocational teacher cohort indicated that in addition to those who evaluated administrators cohort that they were evaluated by the department head. For the vocational education teacher cohort either the school assistant principal or the department head was the individual who evaluated these teachers.

Evaluation by School Year

Question 13 was developed to determine the number of formal evaluations that were conducted for each participant during the last five school years.

The Question:

13. FOR EACH OF THE FOLLOWING SCHOOL YEARS PLEASE SPECIFY THE NUMBER OF TIMES YOU WERE FORMALLY EVALUATED. (DO NOT INCLUDE EVALUATION FOR PERMANENT CONTRACT OR PROFESSIONAL TEACHING CERTIFICATE.) (CROSS OUT ANY SCHOOL YEAR YOU WERE NOT EMPLOYED AS A TEACHER OR SCHOOL ADMINISTRATOR.)

SCHOOL YEAR	NUMBER OF FORMAL EVALUATIONS
1986-1987	_____
1985-1986	_____
1984-1985	_____
1983-1984	_____
1982-1983	_____

Data collected with this question are represented in Table 18 which indicate there was an increase in the number of times participants were evaluated since the 1984/85

school year. All members of each cohort was evaluated at least once a year with some non-vocational education teachers being evaluated as many as four times a year. Whereas, data for the non-vocational education teacher cohort indicate that as greater number were evaluated at least twice for any given year during the five year period. Similarly the administrative cohort data for the number of evaluations per year indicate a mirror image of that for the non-vocational education teacher cohort.

Recommended Evaluators For Vocational Education

To secure the opinion of those involved in the research who the recommended evaluators should be for vocational education teachers question 37 asked:

37. IN YOUR OPINION WHICH OF THE FOLLOWING PEOPLE SHOULD BE CONSIDERED AS QUALIFIED EVALUATORS OF VOCATIONAL EDUCATION TEACHERS. (PLEASE INDICATE YOUR CHOICES BY A CHECK (✓) MARK.) (SELECT AS MANY AS YOU WISH.)

[ ] CENTRAL OFFICE ADMINISTRATORS
[ ] SCHOOL PRINCIPALS
[ ] SCHOOL DEPARTMENT HEADS
[ ] HIGH SCHOOL TEACHERS
[ ] ALBERTA EDUCATION PERSONNEL
[ ] UNIVERSITY PERSONNEL
[ ] INSTITUTE OF TECHNOLOGY PERSONNEL
[ ] APPRENTICESHIP AND TRADE CERTIFICATION PERSONNEL
OTHERS (PLEASE SPECIFY) _____

Data collected with this question can be found in Table 19. These data indicate three types of evaluators were most frequently selected to evaluate vocational education teachers.

These were individuals who were closely related to the school setting, the school principal, the assistant principal of the school or the department head for the

Table 18

Formal Evaluations of Participants by School Year

(N = 282)

SCHOOL YEAR	TIMES FORMALLY EVALUATED	ADM[1] No.	ADM[1] %	NON-VOC[2] No.	NON-VOC[2] %	VOC[3] No.	VOC[3] %	TOTAL No.
1986/87	1	20	7.1	66	23.5	6	2.1	92
	2	1	.4	12	4.3			13
	3	2	.7	2	.7			4
	4			2	.7			2
	5							
	6			1	.4			1
1985/86	1	19	6.7	54	19.1	5	1.8	78
	2	4	1.4	33	11.7	2	.7	39
	3			2	.7			2
	4			1	.4			1
	5							
	6							
1984/85	1	19	6.7	71	25.2	3	1.1	93
	2	3	1.1	12	4.3	1	.4	16
	3			3	1.1			3
	4	1	.4	1	.4			2
	5			2	.7			2
	6			1	.4			1
1983/84	1	8	2.8	48	17.0			56
	2	2	.7	9	3.2	1	.4	12
	3			4	1.4			4
	4							
	5							
	6							
1982/83	1	11	3.9	51	18.1	2	.7	64
	2	3	1.1	6	2.1	1	.4	10
	3			2	.7			2
	4			1	.7			1
	5							
	6							
TOTAL		93		384		21		498*

1 ADM = ADMINISTRATORS
2 NON-VOC = NON-VOCATIONAL EDUCATION TEACHERS
3 VOC = VOCATIONAL EDUCATION TEACHERS

* The total number is greater than 282 because of multiple responses given by some participants.

specific subject area. From the administrative cohort, 20% (53/265) selected principal; 16.6% (44/265), department heads; 16.2% (43/265), assistant principals; the non-vocational education teacher cohort selected 19.0% (157/826), principal; 18.0% (149/826), department heads; 12.2% (101/826), assistant principals; and from the vocational education teacher cohort 27.3% (12/44), department heads; 15.9% (7/44) principals and apprenticeship and trade certification personnel and lastly, 13.6% (6/44) select assistant principals. These data clearly show that research participants did not want personnel from the university to serve as evaluators of the teaching performance of vocational education teachers.

Formative or Summative Evaluation

To determine the opinion of participants whether formative or summative evaluation should be used with teacher evaluation, question 38 asked:

38. THERE ARE TWO MAJOR PURPOSES FOR TEACHER EVALUATION. FORMATIVE EVALUATION -- USED TO IMPROVE TEACHER PERFORMANCE OR SUMMATIVE EVALUATION -- USED TO MAKE JUDGMENTS FOR THE FOLLOWING PURPOSES: TENURE, PERMANENT CERTIFICATION, REQUEST OF SCHOOL ADMINISTRATION, TEACHER REQUEST, SUPERINTENDENTS DISCRETION OR SUMMATIVE EVALUATORS DISCRETION. IN YOUR OPINION WHICH SHOULD BE USED FOR TEACHER EVALUATION? (PLEASE CHECK (✓) ONE OR BOTH.)

[ ] FORMATIVE EVALUATION
[ ] SUMMATIVE EVALUATION

Table 19

Participants Recommended Evaluators of Vocational Education Teachers (N = 282)

EVALUATORS	POSITION						TOTAL
	ADM[1]		NON-VOC[2]		VOC[3]		
	No.	%	No.	%	No.	%	
CENTRAL OFFICE ADMINISTRATORS	34	12.1	76	27.0	1	.4	111
PRINCIPAL	53	18.8	157	55.7	7	2.5	217
SCHOOL ASSISTANT PRINCIPALS	43	15.2	101	35.8	6	2.1	150
SCHOOL DEPARTMENT HEADS	44	15.6	149	52.8	12	4.3	205
HIGH SCHOOL TEACHERS	14	5.0	48	17.0	4	1.4	66
ALBERTA EDUCATION PERSONNEL	23	8.2	59	20.9	1	.4	83
ALBERTA TEACHERS' ASSOCIATION PERSONNEL	11	3.9	42	14.9			53
UNIVERSITY PERSONNEL	8	2.8	24	8.5	1	.4	33
INSTITUTE OF TECHNOLOGY PERSONNEL	16	5.7	78	27.5	4	1.4	98
APPRENTICESHIP AND TRADE CERTIFICATION PERSONNEL	17	6.0	79	28.0	7	2.5	103
OTHERS	2	.7	13	4.6	1	.4	16
TOTAL	265		826		44		1135*

1 ADM = ADMINISTRATORS
2 NON-VOC = NON-VOCATIONAL EDUCATION TEACHERS
3 VOC = VOCATIONAL EDUCATION TEACHERS

* The total number of responses is greater than 282 because some participants selected more than one type of evaluator.

Data collected with this question are shown in Table 20. Data in this table indicate that participants provided more than one choice whether formative and summative evaluation should be the major function of teacher evaluation. The 271 participants who chose to responded to this question provided a total of 440 responses. The aggregate responses of all cohorts show they selected formative evaluation as the major purpose for evaluating teachers 60% (264/440). A breakdown of this aggregate for

Table 20

Participants Recommendation of Formative or Summative Evaluation (N = 282)

TYPE OF EVALUATION	POSITION						
	ADM[1]		NON-VOC[2]		VOC[3]		TOTAL
	No.	%	No.	%	No.	%	No.
FORMATIVE	53	19.6	197	72.7	14	5.2	264
SUMMATIVE	39	14.4	129	47.6	8	3.0	176
TOTAL	92		326		22		440*

1 ADM = ADMINISTRATORS
2 NON-VOC = NON-VOCATIONAL EDUCATION TEACHERS
3 VOC = VOCATIONAL EDUCATION TEACHERS

* The total number of participants is greater than 282. Some participants indicated both formative and summative evaluation.

the response rate of each cohort shows: administrators, 57.6% (53/92); non-vocational education teachers 60.4% (197/326); and 63.6% (14/22) vocational education teachers.

Closely related to question 38 was question 39 which was written to determine why participants believed an evaluator should use both summative and formative evaluation in teacher evaluation.

The Question:

39. IF YOU CHOSE BOTH FORMATIVE EVALUATION AND SUMMATIVE EVALUATION GIVE A BRIEF STATEMENT WHY AN EVALUATOR SHOULD USE BOTH METHODS.

Of the 147 participants responding to this question, only 6 administrators, and 7 non-vocational education teachers said evaluators should use mostly formative evaluation. One administrator and 5 non-vocational education teachers were of the opinion that summative evaluation was the best method of evaluation to get good teacher performance. Twenty-eight administrators, 94 non-vocational education teachers and 6 vocational education teachers indicated both formative and summative should be used for the very same reasons that were part of the stem of question 38.

Additional Comments

This question was used to allow research participants the opportunity of self-expression.

The Question:

40. PLEASE FEEL FREE TO USE THIS SPACE TO WRITE ANY ADDITIONAL COMMENTS YOU WISH TO MAKE.

Data in Table 21 indicates a total of 44 participants elected to complete this question. It is interesting to note that only two from the administrator cohort elected to respond. The non-vocational education teacher group felt that the result of teacher evaluation was not that helpful to the teacher and that the results of an evaluation could provide negative criticism.

Personal Perceptions Questions

A description of the analytic procedures used to analyze questions 14 through 36 was provided in a previous section of this chapter titled statistical procedures. Restated, these questions were grouped into five clusters for reliability. Between group mean differences for each cluster were used for significance in terms of one way ANOVA's followed by post hoc Scheffé multiple comparisons.

Table 21

Participants Comments to Question 40

COMMENTS	ADM[1]	NON-VOC[2]	VOC[3]
Evaluation not helpful, negative criticism		10	1
Evaluators without expertise in field being evaluated waste time		7	
Evaluation should be done by parents or students or fellow staff		6	
Evaluation by people with expertise in a given area may be good theoretically but impractical		3	
There is no absolute method of evaluating teachers.	1	3	1
Summative evaluations are sometimes misused.		3	
Current evaluation methods are good		2	
Teacher and evaluator should agree on instrument used		2	
More than one evaluator should be used		2	1
Evaluation unnerving but helpful		1	
Vocational teacher evaluation should be based on whether or not students are benefiting		1	
Time and money for evaluation purposes may be better spent on students	1		
TOTAL	2	40	2

1 ADM = ADMINISTRATORS
2 NON-VOC = NON-VOCATIONAL EDUCATION TEACHERS
3 VOC = VOCATIONAL EDUCATION TEACHERS

The significance level for each test was set to 0.05. The results of these analyses is summarized in the following text.

Null Hypotheses

The following three null hypotheses were tested. A 0.05 level of significance was selected as a basis for rejecting or accepting each null hypothesis.

The first hypothesis stated:

There was no significant difference between the perceptions that vocational education teachers held and the perceptions that non-vocational education secondary school teachers had toward evaluation of vocational education teachers in the secondary schools in Alberta.

The second hypothesis stated:

There was no significant difference between the perceptions that vocational education teachers had toward their evaluation and the perceptions that school administrators held toward evaluating vocational education teachers as part of their administrative mandate.

The third hypothesis stated:

There was no significant difference between the perceptions that non-vocational education secondary school teachers possessed toward the evaluation of vocational education teachers and the perceptions held by school administrators in the secondary schools of the province.

Format for Questions 14-36

To respond to questions 14-36 research participants made use of a 5-point Likert Scale using these choices:

SD = STRONGLY DISAGREE

D = DISAGREE

N = NEITHER AGREE NOR DISAGREE

A = AGREE

SA = STRONGLY AGREE

Cluster I -- Methods of Evaluation

This cluster included questions 15, 17, 20, 28 and 29 respectively. These questions were related to methods of teacher evaluation.

The Questions:

15. TEACHERS OF ANY SUBJECT SHOULD BE EVALUATED USING THE SAME EVALUATION PROCESS.

17. VOCATIONAL SUBJECT TEACHERS SHOULD BE EVALUATED USING THE SAME EVALUATION PROCESS USED TO EVALUATE OTHER SUBJECT TEACHERS.

20. TEACHERS SHOULD BE EVALUATED ONLY WHILE LECTURING.

28. A STANDARDIZED INSTRUMENT CALLED AN OBSERVER RATING TOOL SHOULD BE USED FOR EVALUATING ALL HIGH SCHOOL TEACHERS.

29. FOR EVALUATION PURPOSES, VOCATIONAL EDUCATION TEACHERS SHOULD BE OBSERVED THE SAME NUMBER OF TIMES AS TEACHERS OF OTHER SUBJECTS.

The data presented in Table 22 indicate the calculated F-ratio with its degrees of freedom F = 6.36, df = 2/272. The F-probability indicates that the difference is significant at p = .002 level, a much higher significance

level than p = 0.05, therefore a statistically significant difference exists.

Table 23 presents a summary of mean scores and standard deviations for responses made by those involved in the study to Cluster I-V questions. The mean scores presented in this table are used for calculating all the Scheffé multiple comparison of means used in this study.

Table 22

ANOVA For Cluster One Questions Between Administrator, Non-Vocational Teacher and Vocational Teacher Groups

SOURCE	SUM OF SQUARES	MEAN SQUARES	DEGREE OF FREEDOM	F RATIO	F PROBABILITY
BETWEEN GROUPS	110.08	55.04	2	6.36	.002
WITHIN GROUPS	2416.33	8.66	279		
TOTAL	2526.41		281		

To determine which pairs of groups were significantly different at the 0.05 level one must compare data found in Table 24. The Scheffé multiple comparison of means revealed that there were statistically significant differences between the administrator group and non-vocational education teacher group for questions in Cluster I with a difference

of means of 15.55 for the administrative group and 14.35 for the non-vocational education teacher group. Also, statistically significant differences were indicated between the administrator group (mean = 15.55) and the vocational education teacher group (mean = 12.79) for responses to this same cluster of questions.

Table 23

Summary of Mean Scores For Cluster I - V Questions

CLUSTER	PARTICIPANTS					
	ADM[1]		NON-VOC[2]		VOC[3]	
	M.[4]	S.D.[5]	M.	S.D.	M.	S.D.
I	15.22	2.43	14.35	2.99	12.79	4.02
II	14.05	2.78	13.96	3.74	13.79	5.01
III	26.19	2.45	25.65	3.07	25.29	2.95
IV	16.81	3.19	16.39	3.39	15.00	3.14
V	16.40	2.23	16.03	2.27	15.29	1.82

1 ADM = ADMINISTRATORS
2 NON-VOC = NON-VOCATIONAL EDUCATION TEACHERS
3 VOC = VOCATIONAL EDUCATION TEACHERS
4 M. = MEAN
5 S.D. = STANDARD DEVIATION

One concludes from the data provided in this analysis of Cluster I questions that two of the null hypotheses were rejected. Data in Table 22 indicated that a significant

difference existed. The means and standard deviations provided in Table 23 for Cluster I questions and each of the three cohorts in this study were used for calculating the Scheffé Procedure. Results of the Scheffé Procedure, presented in Table 24 show that a significant difference at the p = 0.05 level exists between the administrator cohort and the non-vocational education cohort, and the administrator cohort and the vocational education cohort. Therefore, the two null hypotheses rejected were (a) that no difference existed between the perceptions that administrators and non-vocational education teachers had towards evaluation of secondary school vocational education teachers and (b) that no difference existed between the perceptions that administrators and vocational education teachers had towards evaluation of secondary school vocational education teachers.

Cluster II -- Extraneous Influences to Evaluation

To determine the perceptions that participants had toward extraneous influences to Evaluation, questions 16, 21, 26, 31 and 32 were included on the questionnaire. To respond to these questions the same 5-point Likert Scale for Cluster I questions was used.

Questions for Cluster II, as they appeared on the questionnaire read as follows:

Table 24

Scheffe' Multiple Comparison of Means For Cluster One Questions and Administrator, Non-Vocational Education Teacher and Vocational Education Teacher Participants

GROUPS	ADMINISTRATORS	NON-VOCATIONAL	VOCATIONAL
MEANS	15.55	14.35	12.79
ADMINISTRATORS		*	*
NON-VOCATIONAL		—	
VOCATIONAL			

* Denotes pairs of groups significantly different at the 0.05 level.

16. THE QUALITY OF TEACHING EQUIPMENT (EG. BOOKS, MOVIE PROJECTORS, MAPS, SAWS, COMPUTERS) IN A TEACHERS CLASSROOM SHOULD BE AN IMPORTANT CONSIDERATION USED BY EVALUATORS FOR EVALUATING ALL TEACHERS.

21. THE CONDITION OF THE SCHOOL FACILITY (CLASSROOM, LAB, OR SHOP) SHOULD BE AN IMPORTANT CONSIDERATION USED BY EVALUATORS FOR EVALUATING ALL TEACHERS.

26. FINANCIAL SUPPORT GIVEN TO THE PROGRAM A TEACHER IS TEACHING SHOULD BE AN IMPORTANT CONSIDERATION USED BY EVALUATORS FOR EVALUATING ALL TEACHERS.

31. STUDENTS EXPECTATIONS OF HOW A COURSE SHOULD BE TAUGHT SHOULD BE AN IMPORTANT CONSIDERATION USED BY EVALUATORS FOR EVALUATING ALL TEACHERS.

32. THE QUANTITY OF TEACHING EQUIPMENT (EG. BOOKS, MOVIE PROJECTORS, MAPS, SAWS, COMPUTERS) IN A TEACHERS CLASSROOM SHOULD BE AN IMPORTANT CONSIDERATION USED BY EVALUATORS FOR EVALUATING ALL TEACHERS.

Data in Table 25 present the results of the differences that exist between the variables of participants i.e.,

administrators, non-vocational education teachers and vocational education teachers using the results from Cluster II questions. Data shows the calculated F value, F = .03 was less than 1.00, hence not significant.

Table 25

ANOVA For Cluster Two Questions Between Administrator, Non-Vocational Education Teacher and Vocational Education Teacher Groups

SOURCE	SUM OF SQUARES	MEAN SQUARES	DEGREE OF FREEDOM	F RATIO	F PROBABILITY
BETWEEN GROUPS	.90	.45	2	.03	.9666
WITHIN GROUPS	3683.82	13.20	279		
TOTAL	3684.72		281		

Therefore, the three null hypotheses were not rejected. The Scheffe Procedure was not administered for Cluster II questions because there was no significant differences as indicated by data in Table 25.

Cluster III -- Evaluators

Questions 14, 18, 19, 22, 23, 24 and 25 were prepared to determine participants perceptions toward teacher evaluators. Participants could respond by checking the appropriate letter on a 5-point Likert scale.

Cluster III questions asked:

14. MOST SCHOOL ADMINISTRATORS KNOW WHAT CONSTITUTES GOOD OR POOR TEACHING.

18. EVALUATORS SHOULD POSSESS SOME DEGREE OF EXPERTISE IN THE TEACHER EVALUATION PROCESS.

19. IT IS POSSIBLE TO IDENTIFY GOOD TEACHING WHEN IT OCCURS.

22. PARENTS SHOULD BE INVOLVED IN THE EVALUATION PROCESS.

23. SELF EVALUATION FORMS FOR TEACHERS SHOULD BE GIVEN CONSIDERATION BY THE EVALUATOR WHEN COMPLETING TEACHER EVALUATIONS.

24. EVALUATORS SHOULD POSSESS SOME DEGREE OF EXPERTISE IN THE SUBJECT FOR WHICH THE TEACHER IS BEING EVALUATED.

25. THE EVALUATION PROCESS USED BY YOUR IMMEDIATE SUPERVISOR WILL HELP IMPROVE YOUR TEACHING.

Table 26 data show that the calculated F value,

Table 26

ANOVA For Cluster Three Questions Between Administrator, Non-Vocational Education Teacher and Vocational Education Teacher Groups

SOURCE	SUM OF SQUARES	MEAN SQUARES	DEGREE OF FREEDOM	F RATIO	F PROBABILITY
BETWEEN GROUPS	16.22	8.11	2	.93	.3940
WITHIN GROUPS	2437.62	8.68	279		
TOTAL	2437.64		281		

F = .93 is less than 1.00, thus not significant. Therefore, the null-hypotheses were not rejected. The Scheffe' Procedure was not used because a significant difference was not found from data in Table 26.

Cluster IV -- Formative Evaluation

Questions 23, 27 and 30 were designed to obtain the research participants perceptions concerning formative evaluation. A 5-point Likert scale was also used by respondents for these three questions.

The Questions:

23. SELF EVALUATION FORMS FOR TEACHERS SHOULD BE GIVEN CONSIDERATION BY THE EVALUATOR WHEN COMPLETING TEACHER EVALUATIONS.

Table 27

ANOVA For Cluster Four Questions Between Administrator, Non-Vocational Education Teacher and Vocational Education Teacher Groups

SOURCE	SUM OF SQUARES	MEAN SQUARES	DEGREE OF FREEDOM	F RATIO	F PROBABILITY
BETWEEN GROUPS	0.75	0.38	2	0.09	0.91
WITHIN GROUPS	1181.39	4.23	279		
TOTAL	1182.14		281		

27. PROFESSIONAL DEVELOPMENT INVOLVEMENT BY TEACHERS SHOULD BE AN IMPORTANT CONSIDERATION USED BY EVALUATORS FOR

EVALUATING ALL TEACHERS.

30. THE PRIME PURPOSE OF TEACHER EVALUATION IS TO JUDGE AND RECORD A TEACHER'S PROFICIENCY.

Data from Table 27 indicate the calculated F value, F = 0.09 is less than 1.00, hence not significant. The three null-hypotheses are therefore, not rejected. The Scheffe' Procedure was not used in this analysis because no significant difference was found to exist.

Cluster V -- Degree of Satisfaction With Evaluation

Questions 14, 33, 34, 35 and 36 were developed to solicit the perceptions of participants to determine their degree of satisfaction with evaluation. Again a 5-point Likert scale was provided for these five questions.

Table 28

ANOVA For Cluster Five Questions Between Administrator, Non-Vocational Education Teacher and Vocational Education Teacher Groups

SOURCE	SUM OF SQUARES	MEAN SQUARES	DEGREE OF FREEDOM	F RATIO	F PROBABILITY
BETWEEN GROUPS	15.08	7.54	2	1.49	.23
WITHIN GROUPS	1407.50	5.04	279		
TOTAL	1422.58		281		

The Questions:

14. MOST SCHOOL ADMINISTRATORS KNOW WHAT CONSTITUTES GOOD OR POOR TEACHING.

33. DO YOU FEEL UNCOMFORTABLE WHEN BEING EVALUATED?

34. TEACHERS SHOULD BE EVALUATED BY DIFFERENT METHODS THAN THE ONE CURRENTLY USED IN YOUR SCHOOL.

35. I WOULD LIKE TO BE EVALUATED MORE OFTEN.

36. I GENERALLY AGREE WITH THE RESULTS OF PREVIOUS EVALUATIONS OF MY TEACHING PERFORMANCE.

Table 28 data indicate the calculated F value, F = 1.49 is greater than 1.00, hence significant. However, the F-probability indicates that the difference is significant at p = .23, much less significant than the predetermined significance level of p = 0.05. Therefore, the null hypotheses are not rejected.

CHAPTER IV

SUMMARY, CONCLUSIONS, RECOMMENDATIONS AND OBSERVATIONS

Included in the first part of this final chapter is a summary of the study and the second section which focuses on major findings with conclusions, recommendations for further research, and observations by the researcher.

Summary

This section of the chapter includes the problem, the null hypotheses, the population, related research, and the research methodology.

The Problem

The major problem of this study was to determine if vocational education teachers, non-vocational education teachers and school administrators at the secondary school level in Alberta, held different perceptions towards the evaluation of vocational education teachers.

To support this major purpose the following three sub-problems were formulated:

Identify whether there were perceptual differences between vocational education teachers and non-vocational education secondary school teachers toward the evaluation of vocational education teachers.

Determine if vocational education teacher participants had different perceptions toward vocational education teacher evaluation than did school administrators.

Determine if the group designated as non-vocational education secondary school teachers had different perceptions toward vocational education teacher evaluation than did the school administrator sample.

Null Hypotheses

Results of the research process related to vocational education teacher evaluation as stated in the main purpose of this study was to determine the relationship of the variables given in the problem statement. The following three null hypotheses were used to state these variables and were expressed as: There were no significant differences between the perceptions that vocational education teachers held and the perceptions that non-vocational education secondary school teachers had toward evaluation of vocational education teachers in the secondary schools in Alberta.

There were no significant differences between the perceptions that vocational education teachers had toward their evaluation and the perceptions that secondary school administrators held toward evaluating vocational education teachers as part of their administrative mandate.

There were no significant differences between the perceptions that non-vocational education secondary school teachers possessed toward the evaluation of vocational education teachers and the perceptions held by school administrators in the secondary schools of the province.

The Population

The population of this study consisted of all secondary school administrators, non-vocational education teachers and vocational education teachers employed by school boards in Alberta during the 1986-1987 school year. From that aggregate population of 6,604 a random sample of 400 was generated which consisted of: 72 high school administrators; 307 high school non-vocational education teachers and 21 from the high school vocational education teachers. From this random sample of 400, 282 elected to become involved in the study.

Related Research

The second chapter of this study provided a review of related research and literature that focused on the similarities and differences between a vocational education teacher and an industrial arts teacher. Findings from the literature review revealed the differences and similarities between industrial education programs and vocational education programs are still not apparent. This was followed by the history of teacher evaluation in Alberta. References and findings of research related to perceptions of teachers toward teacher evaluation is also part of the content of the second chapter. Teacher evaluation in Alberta was discussed from its earliest beginnings (approximately 1840's) through to 1987 which was influenced by the Provincial Evaluation Policies, Guidelines and

Procedures Program. From a review of the literature it became evident that very little research has been completed which expressed teachers' perceptions toward teacher evaluation.

Methodology

This study was brought to a conclusion by completion of the following research procedures.

A literature review conducted both manually and by computer was implemented by the researcher using the libraries at the University of Alberta. Searches were done both on and off campus and results indicated no research studies were completed that determined if vocational education teachers, non-vocational education teachers and school administrators at the secondary school level, possessed different perceptions toward vocational education teacher evaluation. This helped to establish the need for the study.

The population for this study was selected from the aggregated population of 6,604 high school teachers and school administrators in Alberta with the assistance of personnel from Computer Services, Alberta Education. This population was further broken down by random selection to 72 high school administrators, 307 non-vocational education teachers and 21 vocational education teachers, by using the random selection command from the Statistical Package for the Social Sciences (SPSS-X). The randomized lists provided

by Alberta Education included names and addresses for those who would become involved in this study.

A questionnaire was used as the research instrument to collect data for the study. The questionnaire was developed by the researcher in cooperation with the major advisor and then reviewed by a specialist in instrument design and used in a pilot study. Those involved in the pilot study were not involved in the research. The questionnaire consisted of general information questions, used to collect demographic information for those who participated in the study. An additional twenty three questions were used to solicit the personal perceptions of participants toward the evaluation of vocational education teachers. For these questions a 5-point Likert scale was used.

Preparation for sending out the questionnaire consisted of the following: (1) acquiring a letter of support from Alberta Education as to the importance of the research; (2) obtaining permission from 97 school district superintendents in Alberta to involve some of their personnel in the study; and (3) following up by telephone those superintendents who did not respond to the initial letter. These procedures resulted in 100% of the superintendents granting the permission requested.

After a covering letter was developed it, the self-addressed postcard indicating questionnaire completion were both included with the letter of support from Alberta

Education, the questionnaire and a self addressed envelop were mailed to members who comprised the random sample. Of the 400 letters mailed 282 were returned with completed questionnaires. This represented a 70.5% rate of return. No follow-up procedures were used to increase the rate of return.

Data from the returned research questionnaires were coded by the researcher on to coding sheets. This coded information was key punched by personnel from the Division of Educational Research Services, University of Alberta on to 80 column cards for electronic processing. Data analysis were achieved by selecting either the frequencies, ANOVA or Scheffe' command from the Statistical Package for the Social Sciences-X (SPSS-X). This program generated frequencies and percentages of questions 1-13, 37 and 38. Further data analysis was used for questions 14 - 36 by first combining these questions into five clusters to increase question reliability. An analysis of variance (ANOVA) and Scheffe' procedure was used to determine if statistically significant differences between the three groups existed. Data generated from these analyses were then placed in tabular form for presentation and analysis. Linguistic analysis was used for questions 39 and 40 to categorize response to the open-ended questions and the data generated was assembled into tabular form.

Major Findings

As a result of the study the following major findings were formulated. The majority of the participants in the study 77.7% had over 9 years of teaching or administrative experience. Participants with over 17 years teaching or administrative experience totalled 39% while individual cohorts for this group were: 58.6% of the administrator cohort; 33.3% of the non-vocational education teacher cohort; and 42.9% of the vocational education teacher cohort, fell into this category. Supporting data for this finding can be found in Table 6.

Participants had between 1-6 years teaching experience at the school where they taught at the time of the study was 43.6%.

The largest aggregate of participants (74%) were between 30 and 49 years of age.

The majority (68.4%) of those involved in the research study were male.

Courses taught by participants were: core subjects for both the administrator cohort and the non-vocational education teacher cohort, and vocational education teachers taught vocational education courses only.

Vocational education courses were taught in 53.6% of the schools where participants taught.

A large majority (79.1%) of those involved in the study were not involved in the development of a teacher

evaluation program. Of the administrator cohort 47.4% indicated they had not been directly involved in the development of a teacher evaluation program.

More than half (60.1%) of the participants indicated they used self-evaluation instruments to improve their performance.

The majority of participants (82.8%) indicated all teachers in their school were evaluated with the same instrument.

Of the vocational education teacher cohort 69.2% were evaluated by either the assistant principal or the department head of their school. Whereas, 83.3% of the administrator cohort and 79.9% of the non-vocational education teacher cohort were evaluated by either central office personnel, school principals or school assistant principals.

All participants indicated they were formally evaluated one or more times during each school year from 1982-1983 to 1986-1987 inclusive.

Responding to the question of "who is most qualified to perform formal evaluations? Twenty percent of the administrative cohort felt that principals were most qualified to formally evaluate teachers. Of the non-vocational education teachers 19.0% preferred principals perform this responsibility and 27.3% of the vocational education teacher cohort preferred department heads.

Participants selected formative teacher evaluation more than summative teacher evaluation as a means of improving teacher performance.

The ANOVA results of Cluster I questions (questions 15, 17, 30, 38 and 29) titled Methods of Evaluation indicated a statistically significant differences existed between the cohorts involved the study. The Scheffé multiple comparison of means for these cohorts revealed a significant difference existed between the administrator cohort and non-vocational education teacher cohort; and a significant difference between the administrator cohort and the vocational education teacher cohort. Therefore, the following two null hypotheses were rejected:

There were no significant differences between the perceptions that non-vocational education secondary school teachers possessed toward the evaluation of vocational education teachers and the perceptions held by school administrators in the secondary schools of the province.

There were no significant differences between the perceptions that vocational education teachers had toward their evaluation and the perceptions that school administrators held toward evaluating vocational education teachers as part of their administrative mandate.

For Cluster I questions the non-vocational education teachers and the vocational education teachers saw things differently than the administrative cohort.

For Cluster I-V questions the two null hypothesis that were rejected were the same as for Cluster I. Specifically: There were no significant difference between the perceptions that vocational education teachers held and the perceptions that non-vocational education secondary school teachers had toward evaluation of vocational education teachers in the secondary schools in Alberta.

Conclusions

From the research findings it was found that a profile of the characteristics from the majority of those involved in the study would look like this: Male between 30 and 49 years of age, with a Bachelor of Education degree, over 9 years of teaching experience teaching either core academic or vocational education courses in a school where a vocational education program was offered. These individuals were formally evaluated one or more times each school year from 1982-1987. Although these individuals were not directly involved in the development of a teacher evaluation program they were knowledgeable enough about teacher evaluation to indicate a preference for summative evaluation and in fact used self-evaluation instruments to improve either their administrative or teaching performance.

The major focus of this study was to determine if differences of opinions towards vocational education teacher evaluation existed between the three cohorts in this study. Cluster I (questions 15, 17, 20, 28, and 29) focussing on

METHODS OF EVALUATION proved to be the only cluster of questions which revealed significant differences of opinion between the cohorts. There was then a difference of opinion between the administrator cohort and non-vocational education teacher cohort towards vocational education teacher evaluation. Also, there was a difference of opinion between the administrator cohort and vocational education teacher cohort towards vocational education teacher evaluation.

Recommendations

As a result of the findings and conclusions of this study the following recommendations are made to these groups. It is recommended that:

When central office personnel develop teacher evaluation policy they include teachers from all teaching disciplines at the high school level to help develop these policies.

Prior to school based administrators evaluating teachers, at the secondary level, they make themselves more knowledgeable about the various methods used for evaluation of teachers of all subject areas.

Vocational education teachers pursue a higher level of education to enable them to become more involved at the senior administration level.

Researchers investigating teacher evaluation look at various methods to evaluate teachers of all subject areas

and ensure they include teacher input in their investigation.

It is recommended to any researcher who may wish to replicate this study that a constant ratio sample not be used but that a sample of equal size be selected for each of the three cohorts that may be used.

Observations

The following observations were arrived at by analyzing information in the summary, conclusions or recommendation of this study and while conducting the research. These observations are not supported by research data.

It would have been useful if another study had been completed to determine the perceptions administrators, non-vocational education teachers and vocational education teachers have toward specific examples or samples of various methods or instruments used for teacher evaluation so that comparisons could be made with the results of this study.

Question 39 was phrased so that it eliminated responses from participants who selected either formative evaluation or summative evaluation in responding to question 38. As a result this question was considered to be a weak question. A better wording could have been, "If you chose either or both formative evaluation and/or summative evaluation give a brief statement why an evaluator should use one or both methods."

The rate of return of questionnaires could have been

increased if a follow-up procedure had been used.

Only 66.7% of the vocational education teacher cohort elected to respond to the questionnaire. It is evident this group of teachers are reticent about becoming involved in educational research that is directed specifically towards them.

In retrospect the following weaknesses for the study were evident. Over half of the secondary schools involved in the research did not have a vocational education program. This had a tendency to bias the results of the findings of the study because non-vocational education teachers and some administrators may not be familiar with the vocational education program. These teachers and administrators would have had a better understanding of the role of a vocational education teacher if their school had this program of study.

It is evident that some of the perception questions on the research instrument were not specifically written for evaluation of vocational education teachers. Because of this weakness it is possible that members from the three cohorts responded to these questions from the point of view of how all teachers should be evaluated.

This study would not have been possible had it not been for the excellent cooperation provided by: personnel at Alberta Education; University of Alberta particularly personnel from the Division of Educational Research Services; school superintendents; school administrators and teachers in Alberta.

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APPENDIX A

A copy of all correspondence related to the preliminary phase of this study can be found in this appendix.

33 Paterson Crescent
St. Albert, AB
T8N 4T8

November 27, 1986

Dave Laing
Acting Director Computer Services
Alberta Education
1160 - Jasper Avenue
Edmonton, Alberta
T5K OL2

Dear Dave,

Further to our telephone conversation of Wednesday, November 12, 1986, please accept this request for assistance from Computer Services.

I am currently enrolled as a graduate student engaged in writing my thesis for the Industrial Education Department, University of Alberta. the title for the thesis is, Perceptions of Vocational Education Teachers, Non-Vocational Teachers and School Administrators Toward Evaluation of Vocational Education Teachers in High Schools in Alberta.

To complete the statistics portion of the thesis I require assistance from Computer Services in generating a random sample list of teachers in the province of Alberta. Once this sample is developed the names and school mailing address for each subject is required. A questionnaire will be mailed to each subject. Utmost consideration will be given to insure the identity of these subjects will remain anonymous.

Results of this thesis will be useful to Alberta Education and will be sent to Mr. Ed Magas, Education Consultant, Program Delivery Division, Alberta Education.

Please find attachment which includes the necessary information for acquiring the sample of the population.

Respectfully,

Don Nordheimer
Home Phone: 459-2886
Bus. Phone: 476-8611

DN/ds

encl.

cc: Ed Magas

POPULATION AND RANDOM SAMPLE

DEFINITION OF THE POPULATION

SCHOOL ADMINISTRATORS. Certificated teachers who are designated as a principal, vice-principal or department head in a high school by a school board.

VOCATIONAL EDUCATION TEACHERS. All certificated teachers teaching vocational 22 or 32 level courses for which school boards receive a vocational education grant.

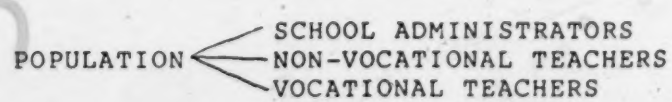
NON-VOCATIONAL EDUCATION TEACHERS. Are certificated teachers whose major responsibility is to teach courses other than vocational education 22 or 32 level courses. School boards do not receive a vocational education grant from Alberta Education for these teachers. These teachers teach at the high school level.

DEMOGRAPHIC CHARACTERISTICS

- either male or female
- currently teaching or administrating in the province of Alberta
- teach high school level courses only (grades 10, 11, 12)

SAMPLE SIZE

- the three sub-groups from the population will be high school administrators, high school non-vocational teachers and finally high school vocational teachers
- the total sample size from these three groups should be between 300-400.
- the sample size for each of the three groups should remain proportional



RANDOM SAMPLE SELECTION

TOTAL NUMBER OF HIGH SCHOOL ADMINISTRATORS = A

TOTAL NUMBER OF HIGH SCHOOL VOCATIONAL TEACHERS = B

TOTAL NUMBER OF HIGH SCHOOL NON-VOCATIONAL TEACHERS = C

TOTAL SAMPLE SIZE = 400

$\frac{A}{A + B + C}$ X 400 = SAMPLE SIZE OF ADMINISTRATORS

$\frac{B}{B + C}$ X 400 = SAMPLE SIZE OF VOCATIONAL A + TEACHERS

$\frac{C}{A + B + C}$ X 400 = SAMPLE SIZE OF NON-VOCATIONAL TEACHERS

From the total population of each group a random sample will be generated which equals the sample size for each group. This random sample will then be generated by a computer program design for random selection.

33 Patterson Crescent
St. Albert, Alberta
T8N 4T8
February 19, 1987

Mr. Scotty Day
Associate Director
Curriculum Branch
Alberta Education

Dear Mr. Day:

The purpose of this letter is to request your support by granting me permission to use Alberta Education letterhead and envelopes for use in a research study.

I am registered as a graduate student with the Faculty of Graduate Studies and Research, University of Alberta. To complete the requirements for my master's degree I am conducting research for a thesis entitled, Perceptions of Vocational Education Teachers, Non-Vocational Teachers and School Administrators Toward Evaluation of Vocational Education Teachers in High Schools in Alberta.

The research design of this study employs the use of a questionnaire to collect data on the perceptions teachers and school administrators hold toward teacher evaluation as it applies to vocational education teachers.

The researcher believes that using Alberta Education letterhead will add significance to the study and hopefully increase the return rate of questionnaires.

Prior to administering this questionnaire I must send out two letters. One to 97 superintendents of various school districts in the province and the second as a covering letter to each participant involved in the study. An initial mailing of 500 letters to superintendents and participants would be required followed by follow-up letters to those who did not respond. At this time I believe 700 letters complete with 700 envelopes of a large size and 700 envelopes of a size to fit into the large envelopes would suffice.

I am prepared to reimburse Alberta Education for the cost of all materials required. Also, all typing and mailing will be completed by the researcher.

Your earliest consideration in this matter would be greatly appreciated.

For your information I have enclosed the following: sample letter to superintendents, sample covering letter to participants, follow-up letter to participants, postcard, questionnaire and a copy of my thesis proposal Chapter 1.

If you have any questions please feel free to call me at 476-8611.

Sincerely,

Donald J. Nordheimer

DJN/ds
Encl.

APPENDIX B

In this appendix can be found a copy of the covering letter to superintendents requesting permission to involve certificated staff in this study. Also included is a copy of the letter from Alberta Education that was sent to superintendents and research participants which indicated that this government agency supported the importance of the study.

March 2, 1987

Mr. Fred Warrington
Superintendent of Schools
School District No. 6
Five Hills, Alberta
3C7 0M9

Dear Mr. Warrington:

I am a full time department head and high school vocational education teacher currently employed by the Edmonton Public School Board. In addition I am registered as a graduate student with the Faculty of Graduate Studies and Research, University of Alberta. To complete the requirements for my master's degree I am conducting research for a thesis entitled, Perceptions of Vocational Education Teachers, Non-Vocational Teachers and School Administrators Toward Evaluation of Vocational Education Teachers in High Schools in Alberta.

The purpose of this letter is to request your cooperation by granting me permission to involve a sample of both high school administrators and teachers from your school jurisdiction in this research.

The research design of this study employs the use of a questionnaire to collect data on the perceptions teachers and school administrators hold toward teacher evaluation as it applies to vocational education teachers.

For your information I have enclosed a sample copy of the questionnaire which will be sent to each participant.

Your cooperation to involve these individuals in this investigation would be greatly appreciated and add to the significance of this study.

For the study I have established a time line of March 13, 1987 when central office administrators are to respond. It would be greatly appreciated if you would honour this date.

If you have any questions related to this study please feel free to call me in Edmonton at 476-8611.

Sincerely,

Donald J. Nordheimer

DJN/ds

Encl.

Alberta
EDUCATION

Devonian Building, West Tower, 11160 Jasper Avenue, Edmonton, Alberta, Canada T5K 0L2

March 4, 1987

To: Administrators
Superintendents
Vocational Education Teachers
Non-Vocational Teachers

Re: Questionnaire

At a time when all subject areas are being reviewed as an outcome of the Secondary Education Review and implementation of the Management and Finance Plan, a study entitled "Perceptions of Vocational Education Teachers, Non-Vocational Teachers and School Administrators Toward Evaluation of Vocational Education Teachers in High Schools" appears to be timely.

To assist in the development of this study I encourage you to complete and return the enclosed questionnaire to Mr. Don Nordheimer at your earliest convenience.

Your cooperation in this matter is greatly appreciated.

Sincerely,

A. A. (Scotty) Day
Associate Director (Support Services)
Curriculum Branch

Enclosure

APPENDIX C

Included in the appendix is a copy of the covering letter, the questionnaire, and the return postcard that was sent to the members of the research population.

April , 1987

Mr. Craig Smith
Blue Hills Composite High School
12345 -67 Street
Blue Hills, Alberta
T5C 0M9

Dear Colleague:

You have been selected from among members of the teaching profession in the province to be a participant in a research study.

The purpose of this study is to determine the perceptions that school administrators and teachers have, toward teacher evaluation of vocational education teachers. Your participation and personal input is important and will contribute significantly to the overall study.

It would be appreciated if you would take time from your busy schedule to complete the enclosed questionnnaire; which should take approximately 20 minutes of your time.

As a department head and high school teacher I can appreciate the time and work pressures you are experiencing in the teaching profession. In addition to these pressures I have chosen to also enrol as a graduate student in the Department of Industrial and Vocational Education, University of Alberta. In partial fulfillment for my master's degree I am conducting a research study entitled, Perceptions of Vocational Education Teachers, Non-Vocational Teachers and School Administrators Toward Evaluation of Vocational Education Teachers in High Schools in Alberta.

To maintain total anonymity in this study, please complete the questionnaire, place it in the enclosed envelope and return it by April , 1987. At the same time or a few days later complete the enclosed postcard and return to me.

In appreciation for your efforts and cooperation I will send you a copy of the research abstract.

If you have any questions about this study, please call me in Edmonton at 476-8611.

Sincerely,

Donald J. Nordheimer

DJN/ds

Encl.

Cover Sheet

QUESTIONNAIRE

TOPIC: Perceptions of Vocational Education Teachers, Non-Vocational Teachers And School Administrators Toward Evaluation Of Vocational Education Teachers In High Schools In Alberta

In 1984, Alberta Education mandated all school jurisdictions ensure accountability in education. To this end the Provincial Evaluation Policies, Guidelines and Procedures Program was developed. Teacher evaluation became an integral component of this program. Review of the literature related to teacher evaluation revealed that most of the researchers who looked at this topic treated it as a specific topic and totally ignored how those involved in the evaluation process perceive it as it affects the participants.

> The purpose of this study is to determine if vocational education teachers, non-vocational education teachers and school administrators, at the secondary school level in Alberta possess different perceptions towards vocational teacher evaluation.

Holdaway and Reikie (1977) describe FORMAL EVALUATION as "a written report, leading to a recommendation or a rating that is submitted to the central office of the school system" (p. 3). This is the definition which will be used throughout this questionnaire.

Your role as a participant in this study is to complete the attached research questionnaire, which should take approximately 20 minutes of your time. Then place it in the enclosed envelope and return it by April , 1987. At the same time or a few days later complete the enclosed postcard and return to me.

Thank you for your cooperation.

QUESTIONNAIRE

PART A

GENERAL INFORMATION

Please place a check (√) in the appropriate box for each category.

1. Years of teaching experience (including this year)

   [ ] 1-2 [ ] 3-4 [ ] 5-6 [ ] 7-8

   [ ] 9-10 [ ] 11-17 [ ] OVER 17

2. Years at your present school (including this year)

   [ ] 1-2 [ ] 3-4 [ ] 5-6 [ ] 7-8

   [ ] 9-10 [ ] 11-17 [ ] OVER 17

3. Sex: [ ] FEMALE [ ] MALE

4. Age: [ ] UNDER 25 [ ] 25-29 [ ] 30-34

   [ ] 35-39 [ ] 40-44 [ ] 45-49

   [ ] 50-54 [ ] 55-59 [ ] 60 OR OVER

5. You currently teach at least one course in:

   [ ] Science [ ] other core academic subjects

   [ ] Business Education [ ] Vocational Education 22, 32, 25, 35

   [ ] Physical Education [ ] none of these courses

6. Your highest university degree attained was: _____

Please place a check (√) in the appropriate box for each category.

7. Vocational 22,32 OR 25, 35 courses are taught in your school.

   [ ] YES [ ] NO

8. As a school administrator or teacher were you directly involved in the development of a teacher evaluation program?

   [ ] YES [ ] NO

9. As a school administrator or teacher do you use a self-evaluation instrument for self improvement?

   [ ] YES [ ] NO

10. To the best of your knowledge all teachers in your school are evaluated by the same evaluation process.

    [ ] YES [ ] NO

11. Have you been formally evaluated? (Do not include evaluation for permanent contract or professional teaching certificate.)

    [ ] YES [ ] NO

12. If YES, please identify the individual/individuals who completed the evaluation. (Please indicate your choice(s) by a check (/) mark.)

Central Office Personnel	[ ]
School Principal	[ ]
School Assistant Principal	[ ]
Department Head	[ ]
Alberta Education Personnel	[ ]
Others (Specify)	_____

13. For each of the following school years please specify the number of times you were formally evaluated. (Do not include evaluation for permanent contract or professional teaching certificate.) (Cross out any school year you were not employed as a teacher or school administrator.)

SCHOOL YEAR	NUMBER OF FORMAL EVALUATIONS
1986-1987	_____
1985-1986	_____
1984-1985	_____
1983-1984	_____
1982-1983	_____

PART B

PERSONAL PERCEPTIONS

Circle the number which most reflects your feelings about the following statements. Use the following code when responding.

SD	=	STRONGLY DISAGREE
D	=	DISAGREE
N	=	NEITHER AGREE NOR DISAGREE
A	=	AGREE
SA	=	STRONGLY AGREE

		SD	D	N	A	SA
14.	Most school administrators know what constitutes good or poor teaching.	1	2	3	4	5
15.	Teachers of any subject should be evaluated using the same evaluation process.	1	2	3	4	5
16.	The quality of teaching equipment (eg. books, movie projectors, maps, saws, computers) in a teachers classroom should be an important consideration used by evaluators for evaluating all teachers.	1	2	3	4	5
17.	Vocational subject teachers should be evaluated using the same evaluation process used to evaluate other subject teachers.	1	2	3	4	5
18.	Evaluators should possess some degree of expertise in the teacher evaluation process.	1	2	3	4	5
19.	It is possible to identify good teaching when it occurs.	1	2	3	4	5
20.	Teachers should be evaluated only while lecturing.	1	2	3	4	5
21.	The condition of the school facility (classroom, lab, or shop) should be an important consideration used by evaluators for evaluating all teachers.	1	2	3	4	5
22.	Parents should be involved in the evaluation process.	1	2	3	4	5
23.	Self evaluation forms for teachers should be given consideration by the evaluator when completing teacher evaluations.	1	2	3	4	5

	SD	D	N	A	SA
24. Evaluators should possess some degree of expertise in the subject for which the teacher is being evaluated.	1	2	3	4	5
25. The evaluation process used by your immediate supervisor will help improve your teaching.	1	2	3	4	5
26. Financial support given to the program a teacher is teaching should be an important consideration used by evaluators for evaluating all teachers.	1	2	3	4	5
27. Professional development involvement by teachers should be an important consideration used by evaluators for evaluating all teachers.	1	2	3	4	5
28. A standardized instrument called an observer rating tool should be used for evaluating all high school teachers.	1	2	3	4	5
29. For evaluation purposes, vocational education teachers should be observed the same number of times as teachers of other subjects.	1	2	3	4	5
30. The prime purpose of teacher evaluation is to judge and record a teachers proficiency.	1	2	3	4	5
31. Students expectations of how a course should be taught should be an important consideration used by evaluators for evaluating all teachers.	1	2	3	4	5
32. The quantity of teaching equipment (eg. books, movie projectors, maps, saws, computers) in a teachers classroom should be an important consideration used by evaluators for evaluating all teachers.	1	2	3	4	5

		NOT AT ALL				VERY MUCH
33.	Do you feel uncomfortable when being evaluated?	1	2	3	4	5
34.	Teachers should be evaluated by different methods than the one currently used in your school.	1	2	3	4	5
35.	I would like to be evaluated more often.	1	2	3	4	5
36.	I generally agree with the results of previous evaluations of my teaching performance.	1	2	3	4	5

37. In your opinion which of the following people should be considered as qualified evaluators of vocational education teachers. (Please indicate your choices by a check (√) mark.) (Select as many as you wish.)

[ ] Central Office Administrators
[ ] School Principals
[ ] School Assistant Principals
[ ] School Department Heads
[ ] High School Teachers
[ ] Alberta Education Personnel
[ ] Alberta Teachers Association Personnel
[ ] University Personnel
[ ] Institute of Technology Personnel
[ ] Apprenticeship and Trade Certification Personnel
Others (please specify)_____

38. There are two major purposes for teacher evaluation. FORMATIVE evaluation -- used to improve teacher performance or SUMMATIVE evaluation -- used to make judgments for the following purposes: tenure, permanent certification, request of school administration, teacher request, superintendents discretion or summative evaluators discretion. In your opinion which should be used for teacher evaluation? (Please check (✓) one or both.)

[ ] FORMATIVE EVALUATION

[ ] SUMMATIVE EVALUATION

39. If you chose both formative evaluation and summative evaluation give a brief statement why an evaluator should use both methods.

40. Please feel free to use this space to write any additional comments you wish to make.

POSTCARD

Dear Don,

I have completed and mailed your research questionnaire on teacher evaluation.

_____
(signed)

DON NORDHEIMER
33 PATTERSON CRESCENT
ST. ALBERT, ALBERTA
T8N 4T8

APPENDIX D

The 1982 edition of the Industrial Education Matrix of courses available to students in high schools of Alberta and the Career Field Matrix for Construction and Fabrication courses available to these students can be found in this appendix.

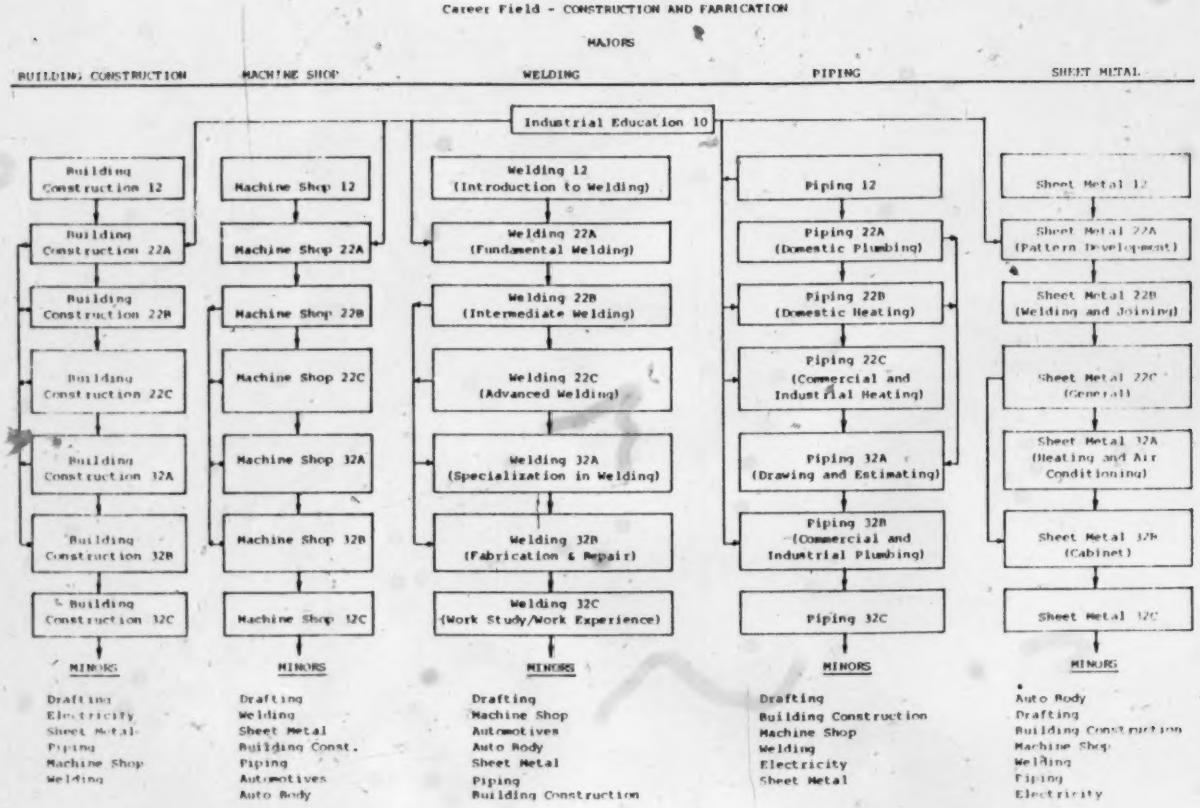
INDUSTRIAL EDUCATION MATRIX

November 1982

Career Development Courses

Exploratory Courses	Career Field	Industrial Education Introductory	Industrial Education Major	Industrial Education Minor	Related
Industrial Education and Home Economics at the Junior High Level	Graphic Communications	Drafting 12 Visual Communications 12 Industrial Education 10	Drafting Graphic Arts Visual Communications	Bldg. Const., Machine Shop, Electricity-Electronics, Welding Sheet Metal, Piping, Graphic Arts Visual Communications Drafting, Visual Communications Drafting, Graphic Arts	Work Experience Business Education Industrial Education
	Mechanics	Mechanics 12 Industrial Education 10 Auto Body 12	Automotives Related Mechanics Auto Body	Welding, Drafting, Machine Shop, Electricity, Auto Body Drafting Welding, Sheet Metal, Machine Shop, Automotives, Electricity	Work Experience Industrial Education Business Education
	Construction and Fabrication	Industrial Education 10 Building Construction 12 Machine Shop 12 Welding 12 Piping 12 Sheet Metal 12	Building Construction Machine Shop Welding Piping Sheet Metal	Drafting, Electricity, Sheet Metal, Piping, Machine Shop, Welding Drafting, Welding, Sheet Metal, Bldg. Const., Piping, Automotives, Auto Body Drafting, Machine Shop, Piping, Automotives, Auto Body, Bldg. Const., Sheet Metal Drafting, Bldg. Const., Welding Machine Shop, Electricity, Sheet Metal Auto Body, Drafting, Bldg. Const., Machine Shop, Welding, Piping, Electricity	Work Experience Industrial Education Business Education
	Electricity - Electronics	Electricity-Electronics 12 Industrial Education 10	Electricity Electronics	Automotives, Drafting, Bldg. Const., Electronics Drafting, Automotives, Bldg. Const., Electricity	Work Experience Business Education Industrial Education
	Personal Services	Industrial Education 10 Beauty Culture 12 Home Economics (Food Studies 10) Food Preparation 12 Health Services 12	Beauty Culture Food Preparation Health Services	Health Services, Food Preparation, Visual Communications Health Services, Visual Communications, Related Mechanics Beauty Culture, Food Preparation	Work Experience Industrial Education Business Education Home Economics
	Horticulture	Horticulture 12	Horticulture	Drafting, Automotives, Bldg. Const., Electricity, Related Mechanics, Piping	Work Experience Industrial Education Business Education

Note. From Industrial Education Manual For Guidance to Teachers, Counsellors and Administrators (p. 16), 1983, Edmonton : Alberta Education.



Note. From Industrial Education Manual For Guidance to Teachers, Counsellors and Administrators (p. 18), 1983, Edmonton : Alberta Education.

APPENDIX E

There were 54 pages of raw data generated by the computer program. Three of these pages have been selected to show the data for both types of analysis procedure. The first type of analysis is frequencies for questionnaire item number 2. The second analysis procedure consists of an ANOVA, MEAN SCORES and SCHEFFÉ for Cluster I questions items 15, 17, 20, 28 and 29.

The following question was used to generate the frequencies crosstabulation on the next page.

The Question:

2. YEARS AT PRESENT SCHOOL (INCLUDING THIS YEAR)

[ ] 1-2 [ ] 3-4 [ ] 5-6

[ ] 7-8 [ ] 9-10 [ ] 11-17

[ ] OVER 17

CROSSTABULATION OF RP BY PRESSCH

RP	PRESSCH							ROW TOTAL
COUNT / ROW PCT / COL PCT / TOT PCT	1	2	3	4	5	6	7	
1	5	8	8	7	6	18	7	59
	8.5	13.6	13.6	11.9	10.2	30.5	11.9	20.8
	13.5	21.1	16.7	23.3	20.0	31.0	17.1	
	1.8	2.8	2.8	2.5	2.1	6.4	2.5	
2	31	29	40	21	23	34	31	210
	14.8	13.8	19.0	10.0	11.0	17.1	14.8	74.5
	83.8	76.3	83.3	70.0	76.7	62.1	75.6	
	11.0	10.3	14.2	7.4	8.2	12.8	11.0	
3	1	1		2	1	4	3	14
	21.4	7.1		14.3	7.1	28.6	21.4	5.0
	2.7	2.6		6.7	3.3	6.9	7.3	
	.4	.4		.7	.4	1.4	1.1	
COLUMN TOTAL	37	38	48	30	30	58	41	282
	13.1	13.5	17.0	10.6	10.6	20.6	14.5	100.0

Participants responses to the following Cluster I questions (15, 17, 20, 28 and 29) were used to calculate the data on the next page.

The Questions:

15. TEACHERS OF ANY SUBJECT SHOULD BE EVALUATED USING THE SAME EVALUATION PROCESS.

17. VOCATIONAL SUBJECT TEACHERS SHOULD BE EVALUATED USING THE SAME EVALUATION PROCESS USED TO EVALUATE OTHER SUBJECT TEACHERS.

20. TEACHERS SHOULD BE EVALUATED ONLY WHILE LECTURING.

28. A STANDARDIZED INSTRUMENT CALLED AN OBSERVER RATING TOOL SHOULD BE USED FOR EVALUATING ALL HIGH SCHOOL TEACHERS.

29. FOR EVALUATION PURPOSES, VOCATIONAL EDUCATION TEACHERS SHOULD BE OBSERVED THE SAME NUMBER OF TIMES AS TEACHERS OF OTHER SUBJECTS.

11 JUN 87 ANOVAs by Group
15:52:14 University of Alberta

- O N E W A Y - -

Variable SCALE1
By Variable GROUP

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	2	110.0656	55.0428	6.3555	.0020
WITHIN GROUPS	279	2416.3258	8.6607		
TOTAL	281	2526.4113			

GROUP	COUNT	MEAN	STANDARD DEVIATION
Grp 1	56	15.5517	2.4292
Grp 2	213	14.3476	2.9909
Grp 3	14	12.7857	4.0226
TOTAL	283	14.5177	2.9965

11 JUN 87 ANOVAs by Group
15:52:14 University of Alberta

- O N E W A Y - -

Variable SCALE1
By Variable GROUP

MULTIPLE RANGE TEST

SCHEFFE PROCEDURE
RANGES FOR THE 0.050 LEVEL -

3.48 3.48

THE RANGES ABOVE ARE TABLE RANGES.
THE VALUE ACTUALLY COMPARED WITH MEAN(J)-MEAN(I) IS..
2.0809 * RANGE * DSQRT(1/N(I) + 1/N(J))

(*) DENOTES PAIRS OF GROUPS SIGNIFICANTLY DIFFERENT AT THE 0.050 LEVEL

Mean	Group	G r p 3	G r p 2	G r p 1
12.7857	Grp 3			
14.3476	Grp 2			
15.5517	Grp 1	*	*	

VITA

Name: Donald John Nordheimer

Place of Birth: Edmonton, Alberta, Canada

Year of Birth: 1948

Post Secondary Education:

Journeyman Machinist with Red Seal, 1970

Bachelor of Education, 1976

Professional Organizations:

Alberta Teachers Association

Industrial Education Council

Related Work Experience:

Journeyman machinist, 1970-1976

High school teacher of industrial education - general and industrial education - vocational courses 1976 to present

Served as assistant department head industrial education M.E. LaZerte Composite High School 1978-1980

Department Head, 1981 to present

Member of Alberta Education and Edmonton Public Schools Curriculum Committees for industrial education metals courses

Conference presentor on the topic: Computer Numerical Control Machining, 1985, 1986

Areas of Special Interest:

Industrial Education - general and vocational

Educational Administration